

# ***SeisSpace®/ProMAX®/ ProMAX® DepthCharge Version 5000.0.1.2 Patch***

## ***Release Notes***

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## What's In This Release

The **5000.0.1.2 patch release** of SeisSpace®/ProMAX®/ProMAX® DepthCharge software provides bug fixes only.

**To go directly** to the enhancements, bug fixes, and known issues for the applications, click on the blue links below:

[Enhancements and New Functionality](#)

[Fixed Issues](#)

[Known Issues](#)

A [Release Letter](#) for the SeisSpace®/ProMAX®/ProMAX® DepthCharge software release, [Introduction](#), [System Requirements](#), [Installation Instructions](#), and [Licensing](#) information are also provided in this document.

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## Release Overview for SeisSpace®/ProMAX®/ProMAX® DepthCharge R5000.0.1.2 Patch

December 11, 2009

Landmark is pleased to provide the enclosed patch for SeisSpace® R5000.0.1.2 software version, ProMAX® R5000.0.1.2 software version, and ProMAX® DepthCharge R5000.0.1.2 software version.

You must have uudecode (shar-utils) installed to install this patch.

If you are installing the patch for a 32 bit installation, you must run the installation on a 32 bit server. Similarly, if you are installing the patch for a 64 bit installation, you must run the installation on a 64 bit server.

The following defects were addressed in this patch.

818061 - Sitemanager and pure ProMAX flow job count

818709 - DDinsert failures when there are multiple DDinserts in the flow

818708 - using the Extract Database Files module after a JavaSeis Data Input

819104 - Merge Database Files now handles more than 3 input databases.

822873 - Remove ProMAX 3D Viewer from processes list

818367 - First break picked edited in ProMAX Trace Display were not getting saved.

Related to 818061 this patch includes new SeisSpace/port/bin/sitemanager and etc/sitemgr scripts that understand the environment variable SM\_OPEN\_FILES which can be set in your sitemanager start script to increase the ulimit for the number of open files for a root owned centralized sitemanager. This will allow the sitemanager to accommodate a larger number of concurrent pure ProMAX jobs than the original release. NOTE: this is only applicable to root owned sitemanagers. Users cannot generally alter ulimit in their run time environments.

As always, feel free to contact the SeisSpace®/ProMAX®/ProMAX® DepthCharge Landmark Depth Imaging support team with any issues that you feel need to be addressed.

Sincerely,

Dan Grygier

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Program Manager  
Seismic Data Processing Applications

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## Release Overview for SeisSpace®/ProMAX®/ProMAX® DepthCharge R5000.0.1.0

August 15, 2009

Landmark is pleased to provide the enclosed release of SeisSpace® R5000.0.1.0 software version, ProMAX® R5000.0.1.0 software version, and ProMAX® DepthCharge R5000.0.1.0 software version.

This release is being distributed for Linux32 and Linux64 Operating Systems as a complete installation.

The major items of interest in this functional upgrade include:

- JavaSeis Parallel Sort has been deleted from the distribution and replaced with the Inline Merge Sort.
- Delivery of the Inline Merge Sort that can be used effectively on very large volumes and does not have the requirement to precompute the sort maps. This tool can also be used as a replacement for the ProMAX® inline sort tool.
- Enabled exec license checkout for Hybrid and pure SeisSpace® flows.
- Inclusion of more of the tools that were made available from Weinman Geoscience.
  - 3D Arbitrary Line Select
  - 3D Area Selection
  - 3D Pass Fan Filter
  - 3D Reject Fan Filter
  - TFD Noise Rejection
  - Trace Selection
  - Static Binning\*
  - Median Frequency Filter
- A purpose built CVS analysis tool to replace and greatly enhance the original functionality from the CVS analysis macro that used Screen Display.
- A purpose built interactive graphical geometry QC tool that allows you to display the first break picks along with a basemap and seismic data display. The shot locations can be interactively moved around to find the true X-Y position of the shot based on visual alignment of the first arrivals.
- Significant improvements to the Cross-Spread database and header generation tools including a graphical method of defining the shot line corridors.

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- Reinstated the Receiver Spread Checking\* ProMAX® process.
- Added the “Define 3D Project LIN Database\*” tool which is a macro that updates the LIN database with the project numbering scheme and X-Y positions without having to run an entire poststack 3D geometry job and then opens DBTools for QC of the line and coordinate space.
- Performance improvements in reading and writing JavaSeis datasets related to how often the map file was being accessed. This should relieve a lot of the pressure on Primary Storage as the data are being written and read again.
- Better prevention for filling primary storage by overwriting a JavaSeis dataset that had been emptied and not re-created prior to writing to it again.
- Better protection for preventing the creation of duplicate extents for JavaSeis datasets which rendered them hard to read and with missing frames. It should be safe to utilize the dynamic extent allocation and not have to fall back to the extent pre-allocation.
- Delivery of a time domain high resolution radon noise attenuation capability in the Interactive Radon Analysis tool. The hi-resolution time domain radon can be used to do a better analysis. The application tool will follow in the next functional upgrade. For now you can use the hi-resolution option to pick a better separation function which can then be applied in the existing radon filter tool.
- Replacement for the original JavaSeis Synthetic Generation tool to make it more flexible including the capability to output stack synthetics as well as more information in the trace headers.
- Many updates for usability and functionality in the 3D Viewer including a 3D visualization of picking mutes on 3D volumes of CDP gathers or shot records. NOTE: all 3D viewer features and functions are being delivered under the “development status” which means that you are free to utilize the tool but be aware that there will probably be some problems encountered as you work with it. We welcome feedback and defect reports on this capability.
- Many updates for usability and general promotion to production status of the SeisSpace® Trace Display tool.
- Multiple job printout string search from replica jobs managed by the Replica Job Table.
- Enabled access to dataset information and fold maps from the data IO menus in the flow editor.
- Enabled a file lock on the Replica Table file so that only one user can have it available for writing at a time. Also added a geometry and column management files that store which columns are shown and in what order as well as the basic geometry of the table window for the Replica Table and the Replica Job Table.
- The manner in which flows are converted to templates and back to flows is now much simpler

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as we have removed the concept of the “inactive templates”. The action of de-templating a flow removes all information about replicas. You can use the column selector to decide which templates to show in the RJT.

- Enhanced the method used to store user defined headers so that they can optionally be stored at the Data\_Home, Area, or Line level with options to restrict this behavior and the ability to move entries around in the hierarchy.
- Updates to the manner in which the data context is handled by ProMAX® tools in a Hybrid flow. Some tools do not change the context so they have been flagged in the Processes list with the “i” flag which tells the intelligent parameterization to ignore them. Other tools that do change the context have been updated to adjust the context properly. This is an effort to reduce the number of times users are required to put the Data Context editor into the flow to reset the context. This will be an ongoing effort over the next couple of releases.
- Updates to the Fold Map with interaction to the Replica table so that you can more automatically populate columns in the Replica table based on ranges in a dataset context.
- Implemented a method allowing users to set defaults to parameters in SeisSpace® tool menus. The same method can also be used for ProMAX® menus. This is done by the user building a flow that contains the processes that have different desired defaults and setting and marking the defaults. NOTE: the site level administrative defaults are stored in the .../SeisSpace/etc directory. You may find it better to move the SeisSpace/etc directory to SeisSpace/./SSetc (down one level) and address it using the PROWESS\_ETC\_HOME environment variable in the SSclient startup script so that you don't delete your configuration changes if you reinstall the product.
- Updates to the header Crossplot tool and embedded crossplot in the SeisSpace® Trace Display.
- Updates to the SeisSpace® development environment to make it easier to write SeisSpace® tools using standard libraries and services for common operations.
- Update to the SeisSpace® development environment where multiple versions of help files can now exist if they need to be different for tools that are in Dev vs. Alpha vs. Prod status. See file PROWESS\_HOME/etc/flowbuilder/Example0AddAmplitudeProc.xml for embedded documentation
- Moved the location for user ProMAX® exec tool type file to the PROMAX\_HOME/port/menu and MY\_PROMAX\_HOME/port/menu directories instead of SeisSpace/etc directory. This way user exec tools can be managed in a separate file outside of the installation so that information is not lost if the product is reinstalled.
- DepthCharge was fixed so that the example data and tutorial data creation flows now operate properly.
- Enabled a user defined memory setting for the Sitemanager. You may find it necessary to

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increase the memory for the Sitemanager as you increase the number of jobs you manage.

- Added a search index for the help files to allow global text searches over the entire set of PDF files instead of just the one pdf file that is currently open. **Note:** This feature requires third-party software, Adobe Acrobat Reader 8.0 or later, to be installed on your system.
- Added a user specific geometry and column visibility definition file for the Replica Job table. (files are stored at the line level in the data\_home)
- Changed the structure of the files present for a dataset that has been Emptied. The format was changed from the original V1 JavaSeis primary only dataset to a V2 format dataset. Existing JavaSeis datasets that had been emptied can be archived and restored.
- Inclusion of the original LGC IO tools for connection to a 2003.12 “Emerald City” vintage OpenWorks database using the original ProMAX® tools. This will require some manual work to copy some libraries from the original ProMAX® 2003.19.1.1 installation to the current ProMAX® 5000.0.1.0 installation. For more information see the section in this document about installing the libraries for the EC SeisWorks Bridges.
- Header Delete should not be used. Changes were made to the infrastructure to add headers which has limited the use of Header Delete.

Overall, we are confident that you will find this release to be reliable and robust.

As always, feel free to contact the SeisSpace®/ProMAX®/ProMAX® DepthCharge support team with any issues that you feel need to be addressed.

Sincerely,

Dan Grygier

Program Manager  
Seismic Data Processing Applications



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## Release Overview for SeisSpace®/ProMAX®/ProMAX® DepthCharge R5000.0.0

October 1, 2008

Landmark is pleased to provide the enclosed release of SeisSpace® R5000.0.0 software version, ProMAX® R5000.0.0 software version, and ProMAX® DepthCharge R5000.0.0 software version.

This release is being distributed for Linux32 and Linux64 Operating Systems.

Landmark also wants to state that the ProMAX® flow builder/UI and ProMANAGER will only be supported from a usage perspective for this release. We will not be supporting these programs by development and will not be delivering them at all in the next major release. As users, you are highly encouraged to migrate to using the SeisSpace® Navigator/Flow Builder with its embedded flow replication capability.

One of the first things that you will notice is that SeisSpace®, ProMAX® and ProMAX® DepthCharge are combined into a single installation. The ProMAX® tutorials continue to be available separately from the main software installation. Because of the change to start using the LSM/ESD (Landmark Software Manager/Electronic Software Distribution), the tutorials are being delivered as a single protar file that contains all of the areas and lines for all of the tutorials. To install the tutorials, you must run the Restore Wizard from the SeisSpace® navigator.

Please look at pages 8 and 9 of this release notes document for information related to specific "Required System Libraries" that must be loaded onto the servers for the software to run.

There were 6 major development efforts for this release:

1. Provide 3D tools to run in the parallel 3D processing architecture including a distributed memory parallel inline sort tool.
2. Provide a 3D viewer to provide QC displays of poststack and 3D prestack volumes.
3. Deliver Archive and Restore functionality that is integrated into the SeisSpace® Navigator/Flow Builder that properly handles ProMAX® and JavaSeis datasets in complex secondary storage environments.
4. Prestack data publication to OpenWorks™ to support prestack interpretation workflows in combination with the Decision Space Well Seismic Fusion software. This is combined with a new set of processes for general Input/Output from the R5000

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OpenWorks™ model for poststack seismic and interpretation horizons for 3D and 2D projects.

5. Deliver a 2D SRME multiple prediction and removal workflow that includes programs for regularization/de-regularization, multiple estimation, and adaptive subtraction for multiple removal on 2D prestack data.
6. Fix as many of the outstanding critical defects as we can and incorporate the patches that have been prepared relative to the 2003.19.1.1 distribution into this release.

We (The Seismic Data Processing development team at Landmark) would like to set some expectations that should help you better understand what this release is delivering.

We have made the stability and use of ProMAX® a priority for this release. Many of the issues that were addressed for ProMAX® are outlined in the Enhancements and Fixed Defect list later in this document.

Another priority was to ensure that the SeisSpace® Navigator/FlowBuilder/Flow Replicator be fully functional for working in a pure ProMAX® flow environment and provides all of the necessary features and functions that are required to do this work. This includes ensuring that all of the major subsystems such as Tape, Queues, Plotting, Flow Replication, the Development Kit and general running of ProMAX® jobs operate properly when working with the SeisSpace® Navigator/Flowbuilder/FlowReplicator.

We anticipate that the new geophysical processes that are being made available in this release as SeisSpace® tools will help give more of the user community a reason to work with hybrid and pure SeisSpace® flows in combination with JavaSeis datasets to improve the processing throughput performance and quality of the final output data volumes.

Prestack Publication to OpenWorks™, to support the prestack interpretation workflow with the Decision Space Well Seismic Fusion software, was another priority for this development cycle. This includes the new "bridges" to OpenWorks™ data and horizon IO that were implemented as SeisSpace® tools using the Decision Space provided API's and Object Servers. These tools require an R5000 OpenWorks™ installation.

The 3D tools have proven to work well on the datasets that we have had available for testing. We have had very good results on some noisy cross spread test data using combination of the 3D Spatial Filter, the 3D FKK filter and the SNAP workflow where an FX decon was applied to generate the model data to use for the SNAP amplitude replacement. We expect that these tools will continue to evolve in the future.

The 3D viewer will allow you to view poststack data cubes as 3D frameworks and let you compare multiple datasets easily and quickly. You can also expect the 3D viewer to help you QC volumes of prestack data in 3D, 4D, or 5D frameworks by allowing you to quickly scroll through volumes of prestack ensembles (or frames). A major workflow that you

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should be able to use to better QC large volumes of data includes the connections between the Fold Map, the 3D viewer and the 2D viewer. You would first select the fold map for a dataset and then select which volume of frames to display in the 3D viewer. To get more detail of a single frame, you can then link a 2D viewer to the 3D viewer for doing things like picking space variant mutes and/or design gates while interactively selecting the frames from the fold map.

The 2D SRME workflow is based on a set of tools that were developed by Weinman Geoscience Inc. in Dallas TX, USA. These tools are being delivered as a complete set that were designed, written and packaged as a complete SRME solution.

The Archive and Restore that is integrated into the SeisSpace® Navigator is a completely new implementation and is not compatible with the original ProMAX® Archive and Restore archive files. All original archive files will still need to be restored with the original ProMAX® Restore tool. The original Archive tool has been removed from this release. The SeisSpace® Archive and Restore capabilities will allow you to do things such as selecting specific datasets or flows or parts of lines and area to either archive or to restore from an archive. You can also expect the SeisSpace® restore to properly distribute the component of databases and datasets over primary and complex secondary storage configurations.

Overall, we are confident that you will find this release to be reliable and robust.

As always, feel free to contact the SeisSpace®/ProMAX®/ProMAX® DepthCharge support team with any issues that you feel need to be addressed.

Sincerely,

Dan Grygier

Program Manager  
Seismic Data Processing Applications

## Introduction

### ***SeisSpace®/ProMAX®/ProMAX® DepthCharge R5000.0.1.2 Patch***

This patch is meant to be installed over an existing ProMAX/SeisSpace r5000.0.1.0 installation.

### ***Overview***

The Release Notes provide the necessary information to correctly install and configure SeisSpace®/ProMAX®/ProMAX® DepthCharge R5000.1.2. These notes also contain operating system requirements and descriptions of required third-party software, as well as information for setting up parallel configurations, network dependencies and tested hardware configurations.

See “Enhancements, New Functionality and Bugs Fixes” on page [75](#) for a description of the changes associated with this release.

The processing portfolio is comprised of a combination of three major systems. SeisSpace® is the first major system that adds a new User Interface with combined Navigator, Flow Builder, and Flow Replicator and a new processing executive which runs in a different environment than that of the ProMAX® executive. ProMAX® is the second major system with subsystems of General Processing Tools, Tape Input/Output, Queuing, Plotting, and the Development kit. ProMAX® DepthCharge is the third major system that provide the 3D tomography and the Prestack Plane Wave Depth Migration, for iterative velocity model building.

The ProMAX® Flow Builder and ProMANAGER are no longer supported by development and you are advised to use the SeisSpace® user interface to build and manage all ProMAX® flows, all SeisSpace® flows, all Hybrid flows and use the built-in flow replication tools.

### ***Hybrid Flows - Combining SeisSpace® and ProMAX® processes***

Hybrid flows combine the parallel input/output of SeisSpace®/JavaSeis with a separate instance of ProMAX® running on each of the selected nodes.

Hybrid flows run as if you were physically running a separate ProMAX® job on each node. Hybrid flows allow you to distribute the work required to process a data volume over several nodes in parallel with each node receiving only a subset of the input traces.

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**Note:** The hybrid flows are a combination of ProMAX® and SeisSpace® processes in between **JavaSeis Input** and/or **Output** modules. Some processes, such as those that write to the database, are disabled for running in a parallel environment. Other processes are not allowed in the hybrid environment at all. The Flow Builder indicates this information as you build the flow.

### ***SeisSpace®/ProMAX® Version Compatibility***

SeisSpace® and ProMAX® come as a matched set. You must make sure that the correct versions of ProMAX® and SeisSpace® are installed and configured to run together to ensure compatibility between the two systems.

SeisSpace® tools directly access ProMAX® tables.

### ***Defects and Known Problems***

A Known Problems list for this release is available online through Landmark's website. This list is frequently updated.

# System Requirements

## Hardware Requirements

SeisSpace® is supported only on Linux. Landmark recommends the following hardware

Platform	Processor (target)	Memory (minimum)	Memory (target)
Linux 32-bit Intel	dual CPU 2.4 GHz Xeon or greater. (dual chip - single core)	1 GB/CPU	2 GB per chip or 4 GB per node
Linux 64-bit AMD opteron	dual CPU 1.8 GHz or greater. (dual chip - single core)	1 GB/CPU	2 GB per chip or 4 GB per node
Linux 64-bit Intel	dual CPU 1.8 GHz or greater. (dual chip - single core)	1 GB/CPU	2 GB per chip or 4 GB per node
Linux 64-bit AMD opteron	multi core	1 GB/core	2 GB or greater per core
Linux 64-bit Intel	multi core	1 GB/core	2 GB or greater per core

NOTE: Intel Itanium chips are not supported.

## Memory and Storage Requirements

- It is generally recommended to have a minimum of 2 gigabytes of memory per “core” For the purposes of SeisSpace®/ProMAX®, a computer such as a quad-core dual-CPU has effectively 8 CPU’s, 4 CPU’s on each of 2 “quad-core” chips. A minimum of 16 Gb of memory would be recommended per node of this type.
- Augment additions to the main memory by expanding the paging space; a **Main Memory: Paging Space ratio of 4:1** is recommended. For very high memory machines the 4:1 ratio can be relaxed somewhat. Monitor the swap space under normal load conditions to decide the amount of required swap space. It is critical to have more swap space available than the amount

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equal to main memory and this requirement can vary some from one node to another.

- The Manager node should have at least swap = main memory and a value of 1.5 to 2 times main memory is recommended.
- The Login-nodes or nodes where the navigator and a lot of interactive jobs will be running will require more swap. On these nodes you should allocate at least 3 times if not 4 times the amount of main memory as swap space.
- The Processing nodes should be set up to have at least 2 times the amount of swap as main memory but try to go to 3 times if possible.

## ***Operating System Requirements***

SeisSpace®, ProMAX® and ProMAX® DepthCharge are built on operating systems Linux RedHat AWS 4.4 using the 2.6.9-42.ELsmp #1 SMP kernel for both the 32 and 64-bit builds. SeisSpace®, ProMAX® and ProMAX® DepthCharge are not available for Windows, IRIX, Solaris or AIX.

For Linux, Landmark is prepared to support SeisSpace®/ProMAX®/ProMAX® DepthCharge R5000.0.1.0 where any node that is used for administrative purposes, such as running queue servers/schedulers, license managers, aar\_promax, pmgrserver, and the like as well as any node that runs the User Interface and interactive jobs if it is running a full RedHat AWS 5.x operating system. (Landmark will continue to support running on RedHat AWS 4.4 or later as well.)

For Linux compute nodes (nodes in a cluster that only do batch job processing) Landmark is prepared to support CentOS 4.x and 5.x. (Fedora is not supported).

## ***Required System Libraries***

The ProMAX/SS sys/lib/syslibs directory contained a number of run time libraries that were not immediately available from a ~standard~ RHEL install. Over time these were added to the ProMAX\_HOME/sys/lib/syslibs directory to increase the chance that a ProMAX® install would run out of the box. Unfortunately Landmark is no longer able to package and deliver linux system libraries due to export control. There are a couple of system libraries that you will need to make sure are installed on your systems for ProMAX®/SeisSpace® to work.

The sys/lib/syslibs directory has been removed from the ProMAX®/SeisSpace® installation and the locations of the libraries that are required are identified below in terms of their RHEL packages.

[← Go To "What's in this Release?"](#)**•Red Hat Enterprise Linux 4**

Library	Package	Version	Package Filename
libXm.so.3	openmotif	2.2.3-10	openmotif-2.2.3-6.RHEL4.2.x86_64.rpm
libg2c.so.0	libf2c	3.4.6-3	libf2c-3.4.6-3.x86_64.rpm
libreadline.so.4 & libhistory.so.4	readline	4.3-13	readline-4.3-13.x86_64.rpm

**•Red Hat Enterprise Linux 5**

Library	Package	Version	Package Filename
libXm.so.3	openmotif22	2.2.3-18	openmotif22-2.2.3-18.x86_64.rpm
libg2c.so.0	compat-libf2c	3.4.6-4	compat-libf2c-34-3.4.6-4.x86_64.rpm
libreadline.so.4 & libhistory.so.4	compat-readline43	4.3-3	compat-readline43-4.3-3.x86_64.rpm

The package names are standard RHEL rpm names without the version numbers, yum (on RHEL 5) or up2date (on RHEL 4) will pick the current versions given the package names noted.

The Package File names are the files to be downloaded from the Red Hat RHEL website or read from the install media (CD or DVD) The names above are for the x86\_64 architecture. 32 bit versions are available replacing x86\_64 with i386.

They can be installed using "rpm -i {package file}".

**Directed Output O\_DIRECT**

**Note:** We have observed problems with the O\_DIRECT flag for JavaSeis Input/Output and for general flow status tracking between different versions of Linux operating



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systems. Although we specify that you can use combinations of operating systems between the Manager/Login nodes and the compute nodes, you must ensure that the versions of these operating systems treat O\_DIRECT the same.

For all Linux installations you should make sure that your /etc/hosts file does not have your machine name on the loopback address line. Most systems will have an /etc/hosts file similar to the example below after an O/S installation:

```
127.0.0.1 myhostname localhost.localdomain localhost
```

For MPI and most other networking operations to work, you should make sure that your etc/hosts file has the local machine name and constant ip address on a separate line.

```
127.0.0.1 localhost.localdomain localhost
```

```
my-ip-address myhostname.mydomain.com myhostname
```

For installations using DHCP you should make sure that the dhcp server always gives all of the machines the same "my-ip-address" all of the time.

For Linux, all file systems (especially the automounted filesystems) should use TCP rather than UDP.

Each user should have trusted status (i.e., no password required) to be able to rsh and/or ssh from the head node to the compute nodes and from the compute nodes back to the head node. This also includes local workstations if they are being used as user machines for running the navigator and interactive jobs outside of the cluster.

## Linux kernel versions and package requirements

Landmark recommends installing all packages of RedHat Linux as a custom installation. We also recommend to set up the system with **no firewalls**.

Linux Red Hat Version AWS4.x most recent Update with the following packages is needed for ProMAX® and SeisSpace®:

```
mt-st-0.8-1 (for tape devices)
```

Linux Red Hat Version AWS5.x most recent Update with the following packages is needed for ProMAX® and SeisSpace®:

```
mt-st-0.9b-2.2.2 (for tape devices)
```

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and for the ProMAX® Dev Kit:

```
gcc4-4.1.0-18.EL4
gcc-g77-3.4.6-3
gcc-3.4.6-3
gcc4-c++-4.1.0-18.EL4
gcc-c++-3.4.6-3
```

There are a variety of kernel versions with various system patches as well. For RedHat, the minimum recommended kernel version is:

2.6.18-8.el5 #1 SMP for AWS 5.0 or 2.6.0-42.ELsmp #a for AWS 4.4

## Linux System Configuration

**We have found that you will probably need to edit 3 different files to get things to work on the more recent operating systems.**

- **/etc/ssh/ssh\_config**

Add `ForwardX11Trusted=yes` at the bottom. For example:

```
# EscapeChar ~
Host *
    GSSAPIAuthentication yes

# If this option is set to yes then the remote X11 clients will
have full access

# to the local X11 display. As virtually no X11 client supports
the untrusted

# mode correctly we set this to yes.

    ForwardX11Trusted yes
```

- **/etc/X11/gdm/gdm.conf in RH4 or /etc/gdm/custom.conf in RH5**

Make sure that the `DisallowTCP` variable is set to `false`. You can either edit the line from `true` to `false` or add the line

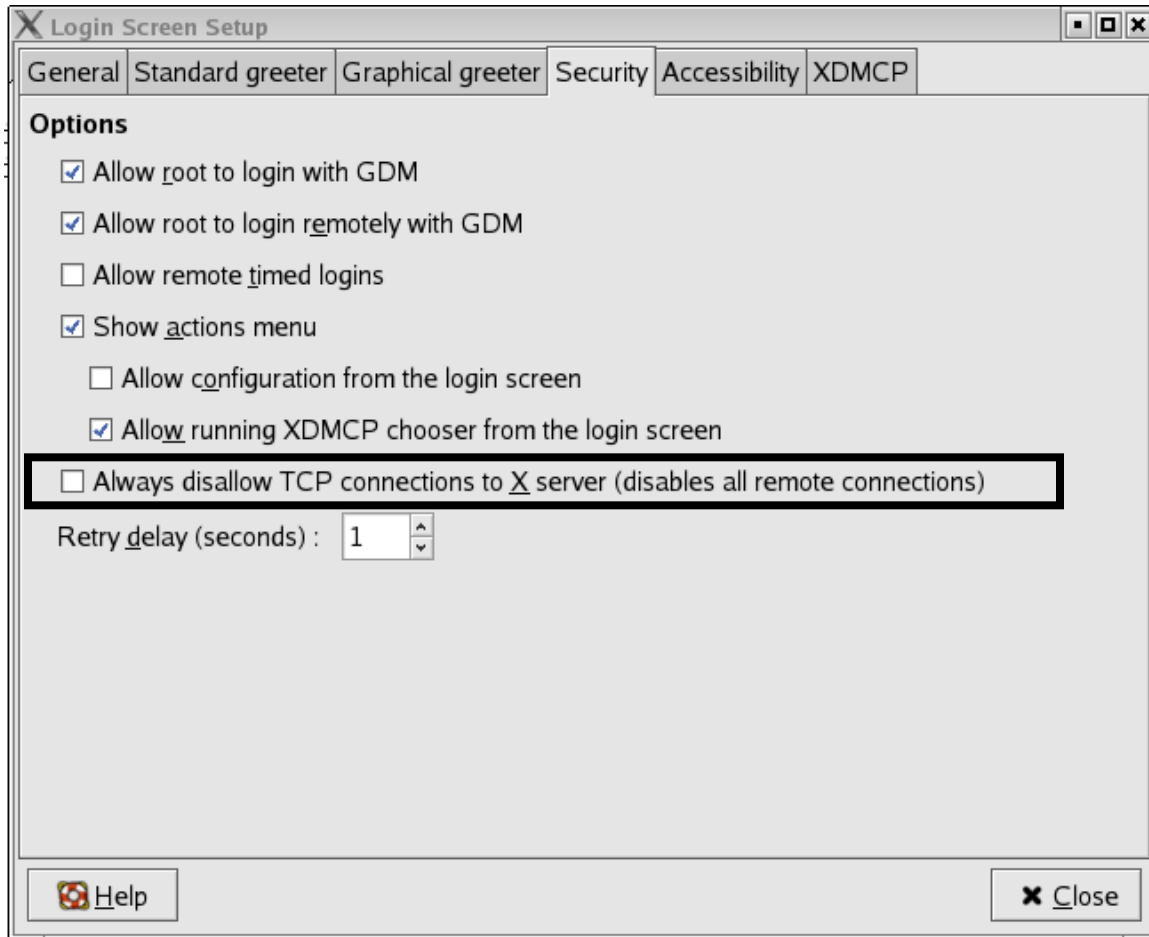
`DisallowTCP=false`.

In RH5 this line goes in the `[security]` section.

You may find it easier to run the `gdmsetup` system command and make sure that the “Always disallow TCP connections to X server” is not selected. This

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will update the gdm.conf or custom.conf file for you.



You will need to restart X for this to take effect

- **/etc/profile.d/krb5\***

either set the permissions on the krb5\* files to r\_\_\_\_\_ or change their names to krb5\*.orig.

- need to install an nVidia video driver and configure it for twinview and color depth of 24.

## Microsoft Windows

**SeisSpace®, ProMAX® and ProMAX® DepthCharge are not supported on or distributed for Windows.**

**If you do not know what operating system, windowing environment, and/or what release you are running, refer to the following table:**

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Platform	Command to Type
Linux	Operating System % <code>uname -a</code>  Motif/X11 % <code>grep -i revision /usr/include/X11/IntrinsicP.h</code>

### ***Installation Disk Space Requirements***

The following table summarizes the disk space requirements when running the standard **InstallAnywhere** procedures:

r5000.0.1.0	Linux	Linux 64
PM/SS/DC	454 MB	457 Mb
2D tutorials	148 Mb	148 Mb
3D tutorials	323 Mb	323 Mb
4D tutorials	61 Mb	61 Mb
VSP tutorials	22 Mb	22 Mb

The ProMAX® tutorials continue to be delivered on a separate image. Because of the change to start using the LSM/ESD (Landmark Software Manager/Electronic Software distribution), the tutorials are being delivered as a single protar file that contains all of the areas and lines for all of the tutorials. To install the tutorials you must run the restore wizard from the SeisSpace® Navigator.

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## Third Party Applications

Landmark uses various third-party applications in the development of its software.

Landmark acknowledges that certain third party code has been bundled with, or embedded in, Landmark's software. The licensors of this third party code, and the terms and conditions of their respective licenses, may be found at the following location:

`$PROMAX_HOME/port/help/rel_notes/third_party.pdf`.

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## International Trade Compliance

This application is manufactured or designed using U.S. origin technology and is therefore subject to the export control laws of the United States. Any use or further disposition of such items is subject to U.S. law. Exports from the United States and any re-export thereafter may require a formal export license authorization from the government. If there are doubts about the requirements of the applicable law, it is recommended that the buyer obtain qualified legal advice. These items cannot be used in the design, production, use, or storage of chemical, biological, or nuclear weapons, or missiles of any kind.

The ECCN's provided in Release Notes represent Landmark Graphics' opinion of the correct classification for the product today (based on the original software and/or original hardware). Classifications are subject to change. If you have any questions or need assistance please contact us at <mailto:FHOUEXP@halliburton.com>

Under the U.S. Export Administration Regulations (EAR), the U.S. Government assigns your organization or client, as exporter/importer of record, responsibility for determining the correct authorization for the item at the time of export/import. Restrictions may apply to shipments based on the products, the customer, or the country of destination, and an export license may be required by the Department of Commerce prior to shipment. The U.S. Bureau of Industry and Security provides a website to assist you with determining the need for a license and with information regarding where to obtain help.

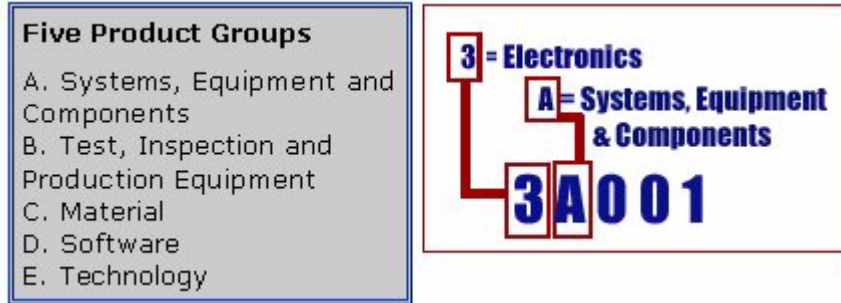
The URL is: <http://www.bis.doc.gov>

### ***Definitions***

CCATS (Commodity Classification Automated Tracking System) - the tracking number assigned by the U.S. Bureau of Industry and Security (BIS) to products formally reviewed and classified by the government. The CCATS provides information concerning export/re-export authorizations, available exceptions, and conditions.

ECCN (Export Control Classification Number) -The ECCN is an alpha-numeric code, e.g., 3A001, that describes a particular item or type of item, and shows the controls placed on that item. The CCL (Commerce Control List) is divided into ten broad categories, and each category is further subdivided into five product groups. The CCL is available on the [EAR Website](#).

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The ECCN Number, License Type, and the CCATS Numbers for this product are included in the table below. Also included is the date the table was last updated.

Product/Component/R5000	ECCN Number	License	CCATS Number	Last Date Updated
ProMAX®/SeisSpace®	5D002	ENC	G054429	2/11/2008

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## Patch List

Not applicable.



## Installation

### ***SeisSpace®/ProMAX®/ProMAX® DepthCharge R5000.0.1.2 Patch***

The ProMAX/SeisSpace 5000.0.1.2 Patch installs on top of a pre-existing ProMAX/SeisSpace R5000.0.1.0 installation. This installation assumes that ProMAX and SeisSpace 5000.0.1.0 are installed from Install Anywhere as they were delivered and that the ProMAX and SeisSpace directories are on the same root directory:

```
/a/b/c/ProMAX
```

```
/a/b/c/SeisSpace
```

In a shell window you will need to "cd" to the installation directory where ProMAX and SeisSpace 5000.0.1.0 were installed. Set the INSTALL\_DIR environment variable to this directory.

Using the above example: INSTALL\_DIR=/a/b/c

You will need to have write permissions in the ProMAX and SeisSpace directories. The 5000.0.1.0 ProMAX installation must be addressable as \$INSTALL\_DIR/ProMAX and the SeisSpace installation should be addressable as \$INSTALL\_DIR/SeisSpace.

You should install that patch as the same user that did the original ProMAX/SeisSpace/DepthCharge 5000.0.1.0 installation.

You must also have /usr/bin/uudecode and uncompress installed and available on the system where you are installing the patch. These can be found in the shar-utils rpm.

**MAKE SURE YOU HAVE ABOUT 200 MEGABYTES of AVAILABLE DISK SPACE ON THE DISK THAT CONTAINS the INSTALL (you need room for the tar file and the backup tar file)**

The installation script will check available disk space and warn you if there does not appear to be enough available to complete the patch installation.

**MAKE SURE THAT THERE ARE NO INSTANCES OF ANY JOBS OR USER INTERFACES RUNNING AND ALSO MAKE SURE THAT THERE ARE NO PVM DAEMONS RUNNING (use the port/bin/killpvmd script to kill the pvmd processes).**

Stop all sitemanagers running against SeisSpace r5000.0.1.0.

There can be no processes running because, if there are, the files that are being used by the running executables will not be able to be deleted and replaced by the patch install.

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Other executables to look for would include any exec, superExec, ssexecs, python, pvm, ssclient, sitemanager and agcolor.

1. Set the INSTALL\_DIR variable as appropriate. For csh, use:

```
setenv INSTALL_DIR value
```

For ksh,sh or bash, use:

```
export INSTALL_DIR=value
```

INSTALL\_DIR should be set to the base directory where ProMAX and SeisSpace 5000.0.1.0 are installed. For example, if your install directory structure is /a/b/c/ProMAX and /a/b/c/SeisSpace - set INSTALL\_DIR to a/b/c

2. Change directory to the \$INSTALL\_DIR/ProMAX/install directory

```
cd $INSTALL_DIR/ProMAX/install
```

3. Copy the patch install script into this directory. It will be named:

```
PatchInstall_ProMAX_SeisSpace_5000.0.1.2_${MACHTYPE}.sh
```

4. where MACHTYPE will be either linux or linux64

4. Change the permissions to ensure that it is executable as follows:

```
chmod 755
```

```
PatchInstall_ProMAX_SeisSpace_5000.0.1.2_${MACHTYPE}.sh
```

6. Execute the installation script:

```
./PatchInstall_ProMAX_SeisSpace_5000.0.1.2_${MACHTYPE}.sh
```

#### NOTES:

A log of the installation process is written to the:

`$INSTALL_DIR/ProMAX/install/PatchInstall_ProMAX_SeisSpace_5000.0.1.2.log`

there will also be a compressed tar file of the original files that were replaced

`$INSTALL_DIR/ProMAX/install/  
Orig_Files_ProMAX_SeisSpace_5000.0.1.2_${MACHTYPE}_tar.Z`

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## **SeisSpace®/ProMAX®/ProMAX® DepthCharge R5000.0.1.0**

Starting with Release 5000.0.0 all Landmark software will be made available on a server for customers to download, using the Landmark Software Manager (LSM). See the Landmark Software Manager online help for details.

The software is delivered by Electronic Software Distribution from the internet. After downloading the installation instructions and setup.bin file, you can install the applications using the InstallAnywhere installation package.

This install media contains the shell script "setup" and the necessary tools to extract the application from the CD and transcribe the application to disk.

**Note:** The software installation starts from a script that prompts for input; you do not need root privileges.

### **Using the InstallAnywhere Installer**

Use the following procedure install the Landmark applications onto your file system.

The following section explains:

- How to start the Release Manager program.
  - How to select the file systems where the applications are to be installed.
  - How to complete the installation procedure
1. Locate the "setup.bin" file for the application you need to install. In a normal mode, you will have downloaded the file from the WEB site using the Landmark Software Manager.
  2. In a terminal window, change directories to the directory where the setup.bin file is. For a typical Linux installation, type the following command:

```
cd /a/b/c/whatever the path to the directory where setup.bin is
```

3. execute "setup.bin" :

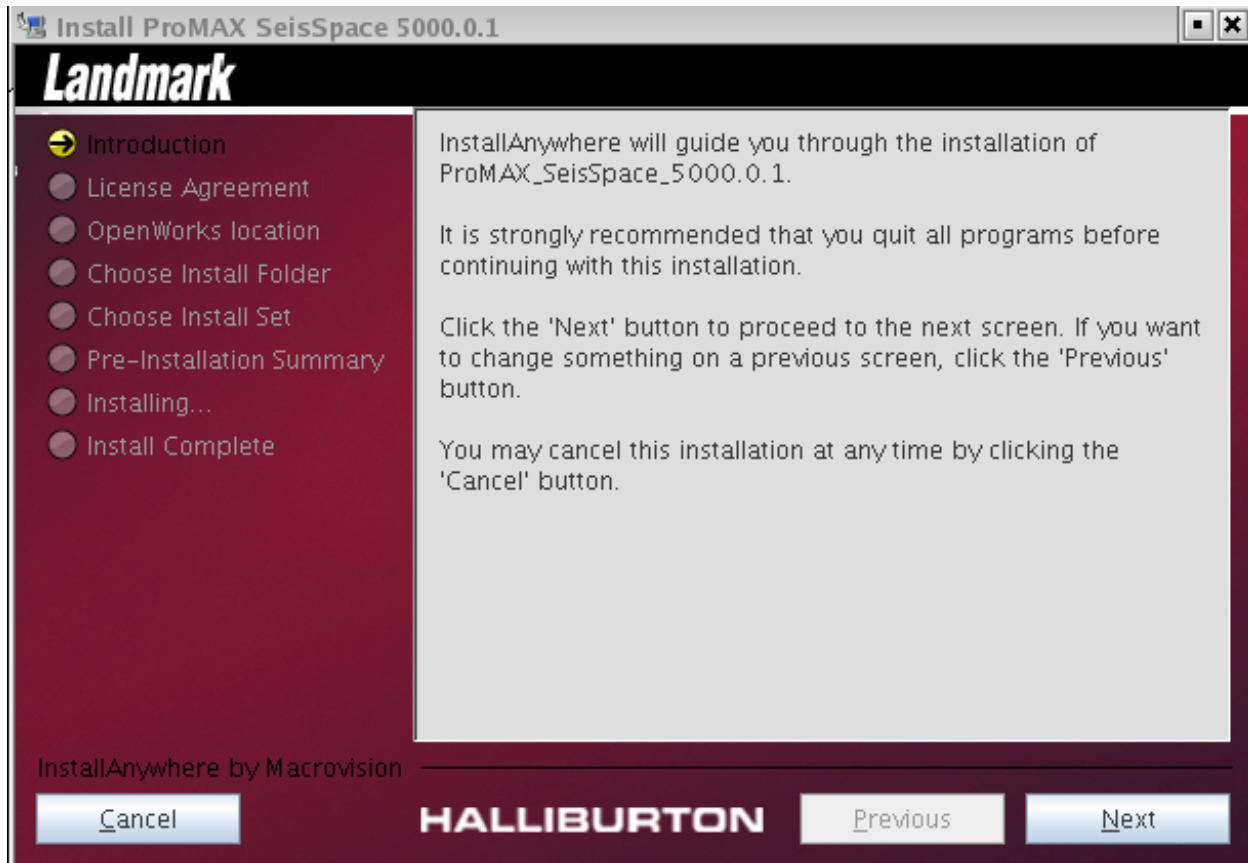
```
./setup.bin
```

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The following informational message appears:

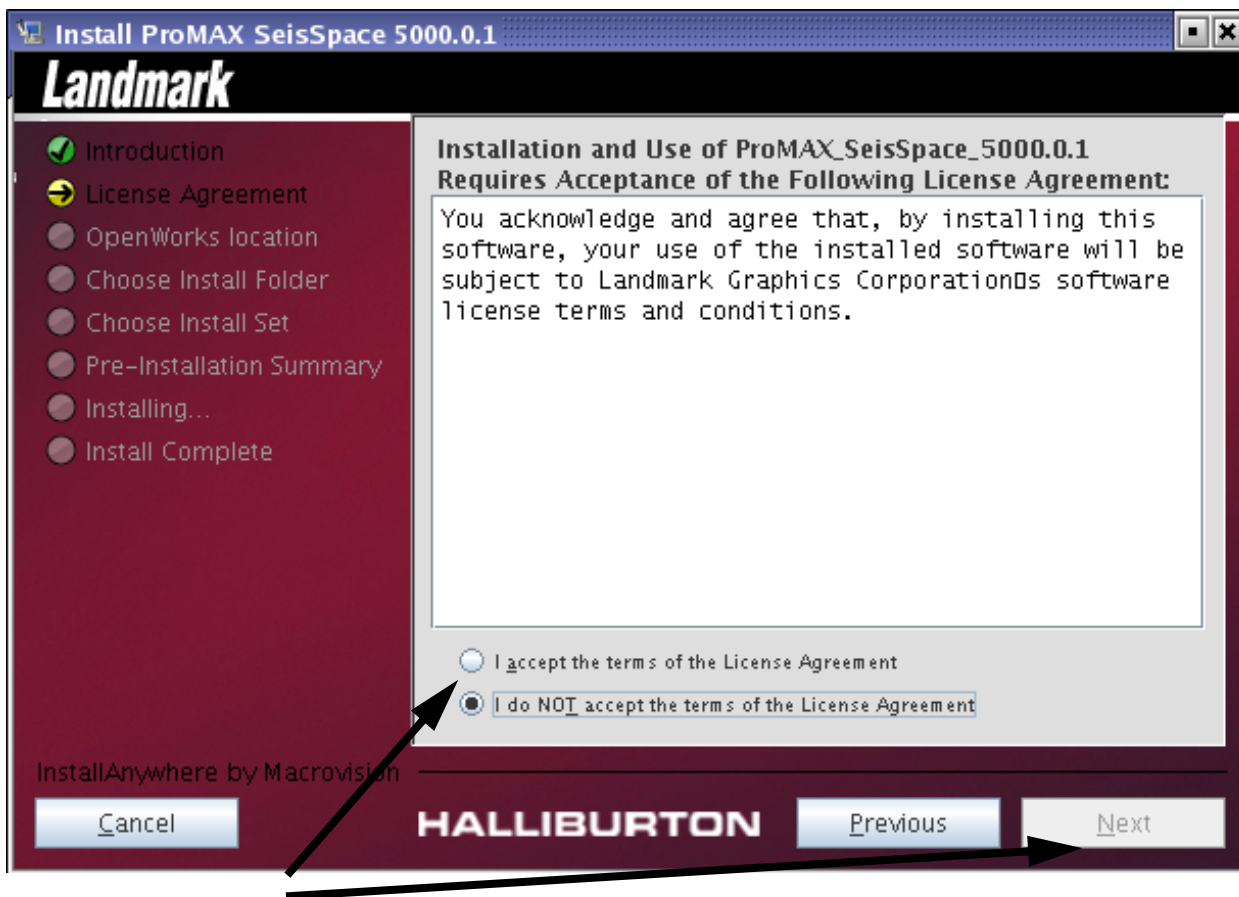


After a few moments, this window will disappear and the following dialog will appear:

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Click the **Next** button to proceed and the following dialog will appear:

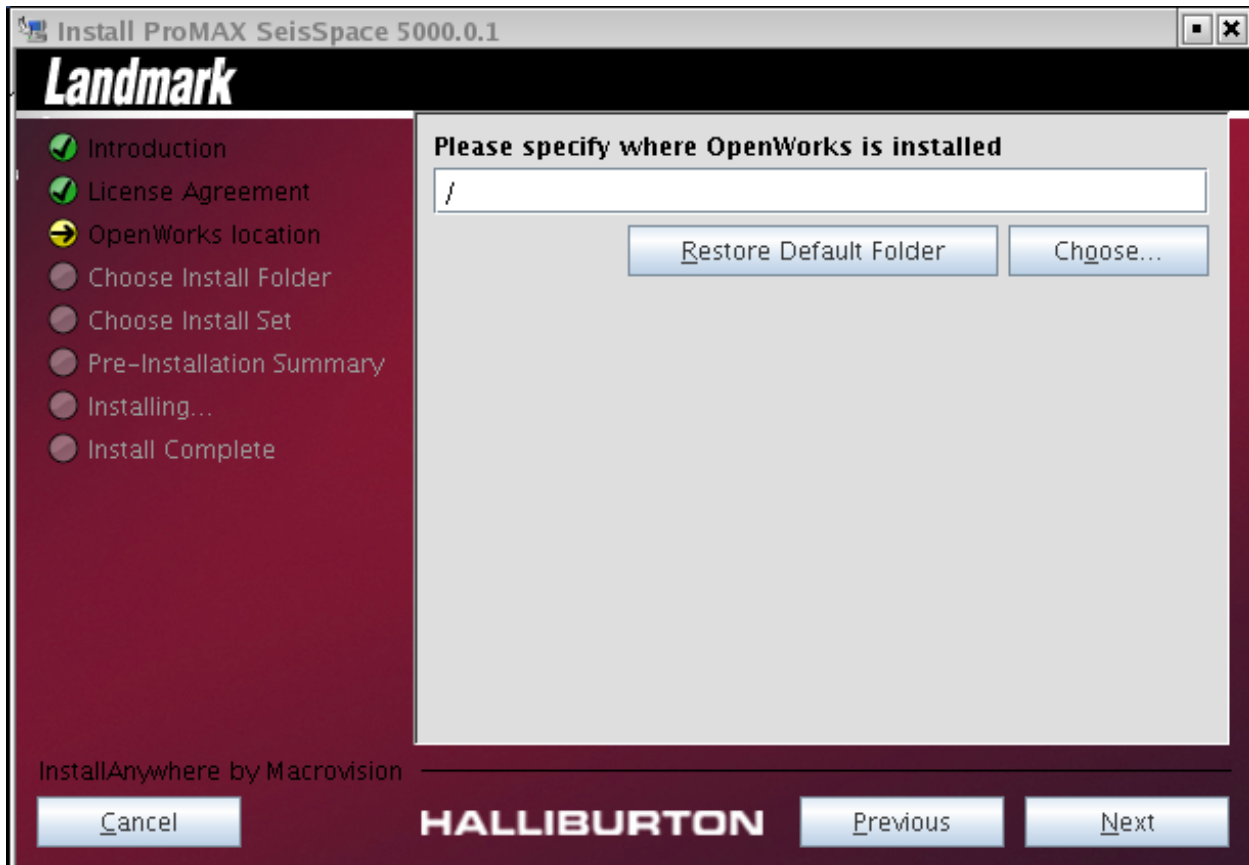
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Select “I accept the terms of the License Agreement” and click the **Next** button and the

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following dialog will appear:



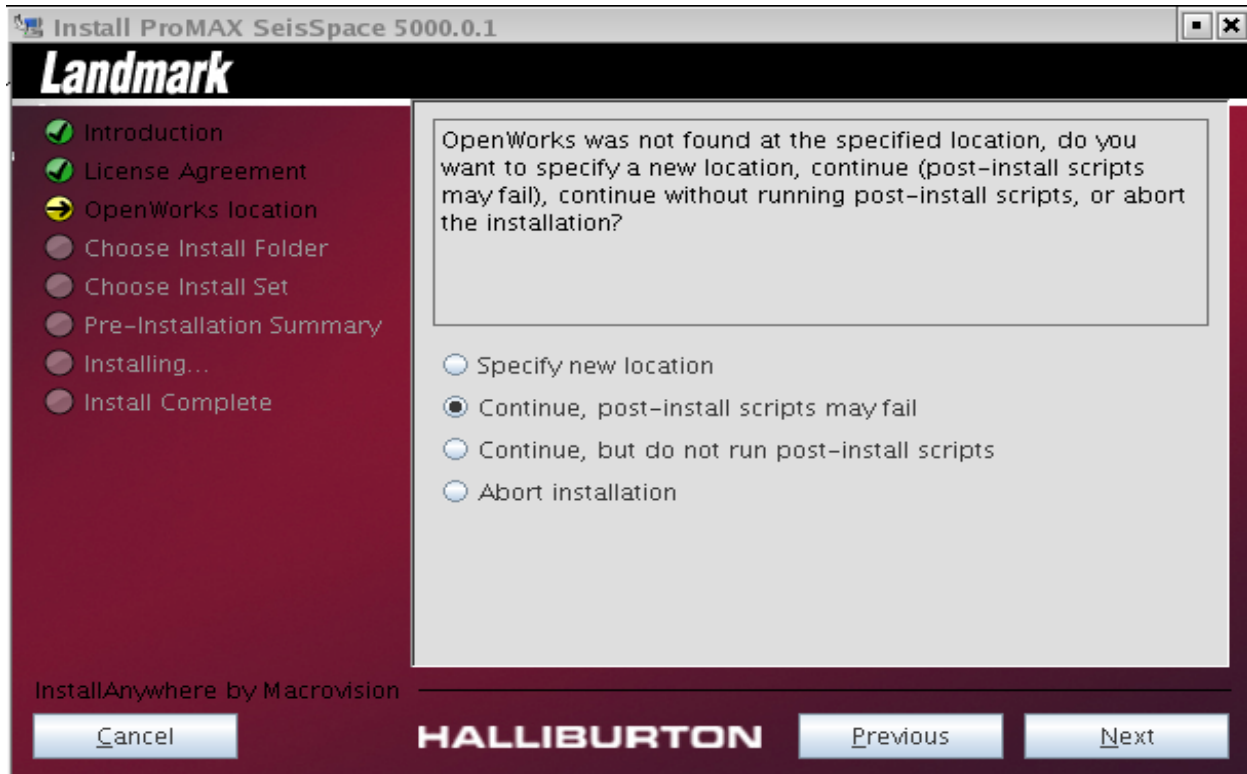
Enter (or Choose using the browser) the full path to your installation directory. This path is used to determine where to install the application. For example, if you want to install SeisSpace®/ProMAX®/ProMAX® DepthCharge in a subdirectory from /usr/apps, then enter /usr/apps and SeisSpace® will be installed in /usr/apps/SeisSpace®. ProMAX® and ProMAX® DepthCharge will be installed in /usr/apps/ProMAX.

When installed, you should have a directory structure similar to the following:

```
.../usr/apps/ProMAX
.../usr/apps/versions
.../usr/apps/SeisSpace
```

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After entering the installation directory, Click on the Next button and the following dialog will appear:



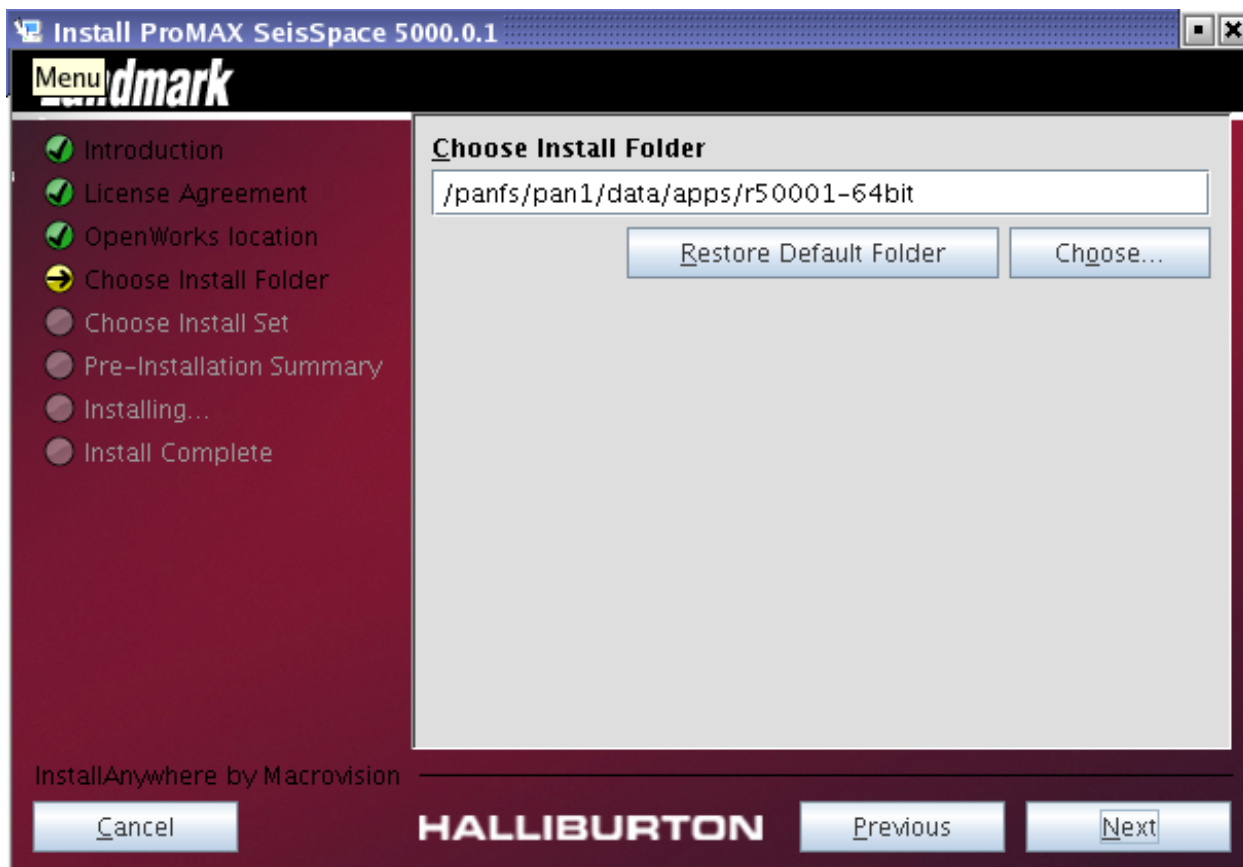
If ProMAX® and SeisSpace® are installed without OpenWorks™, you will see the above dialog

Select “Continue, post-install scripts may fail” and then click the **Next** button and the



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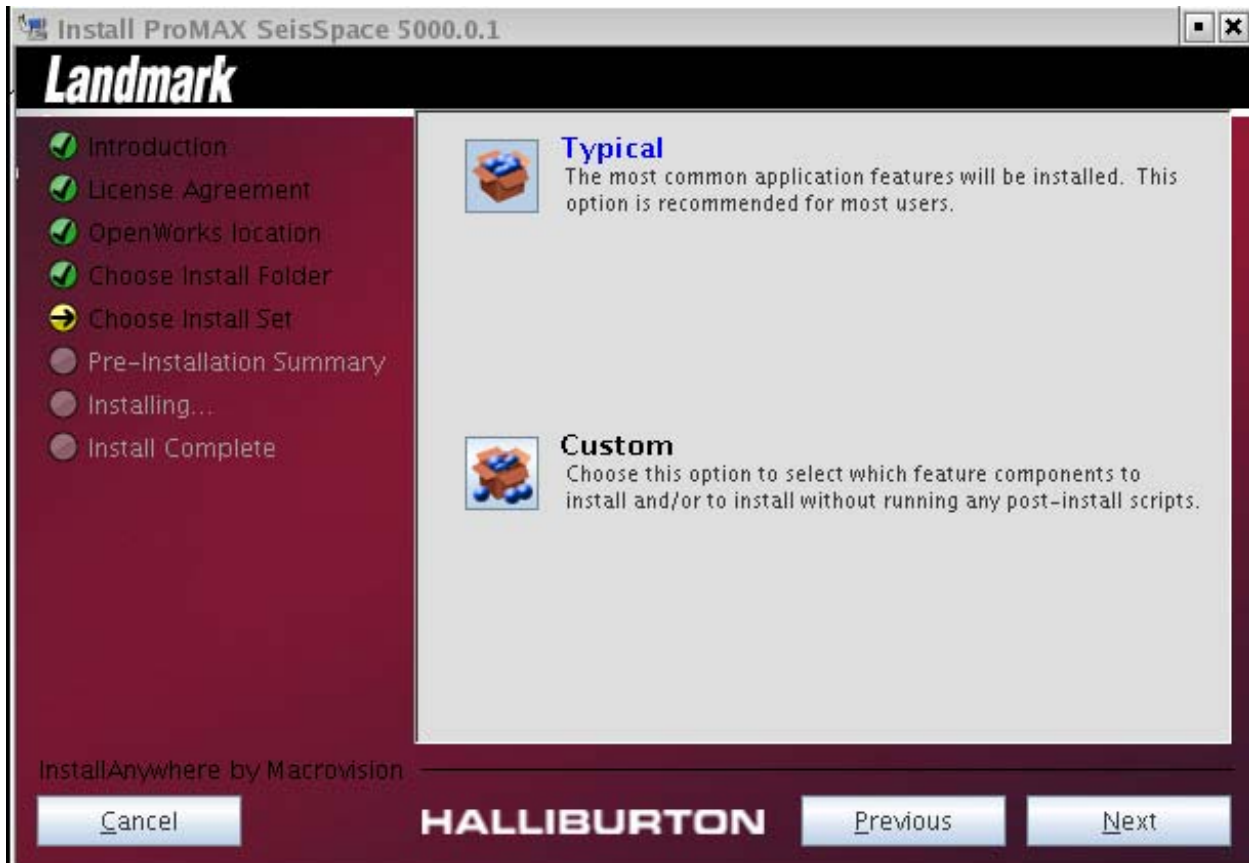
following dialog will appear:



If the directory that is shown matches your desired installation directory, click on the next

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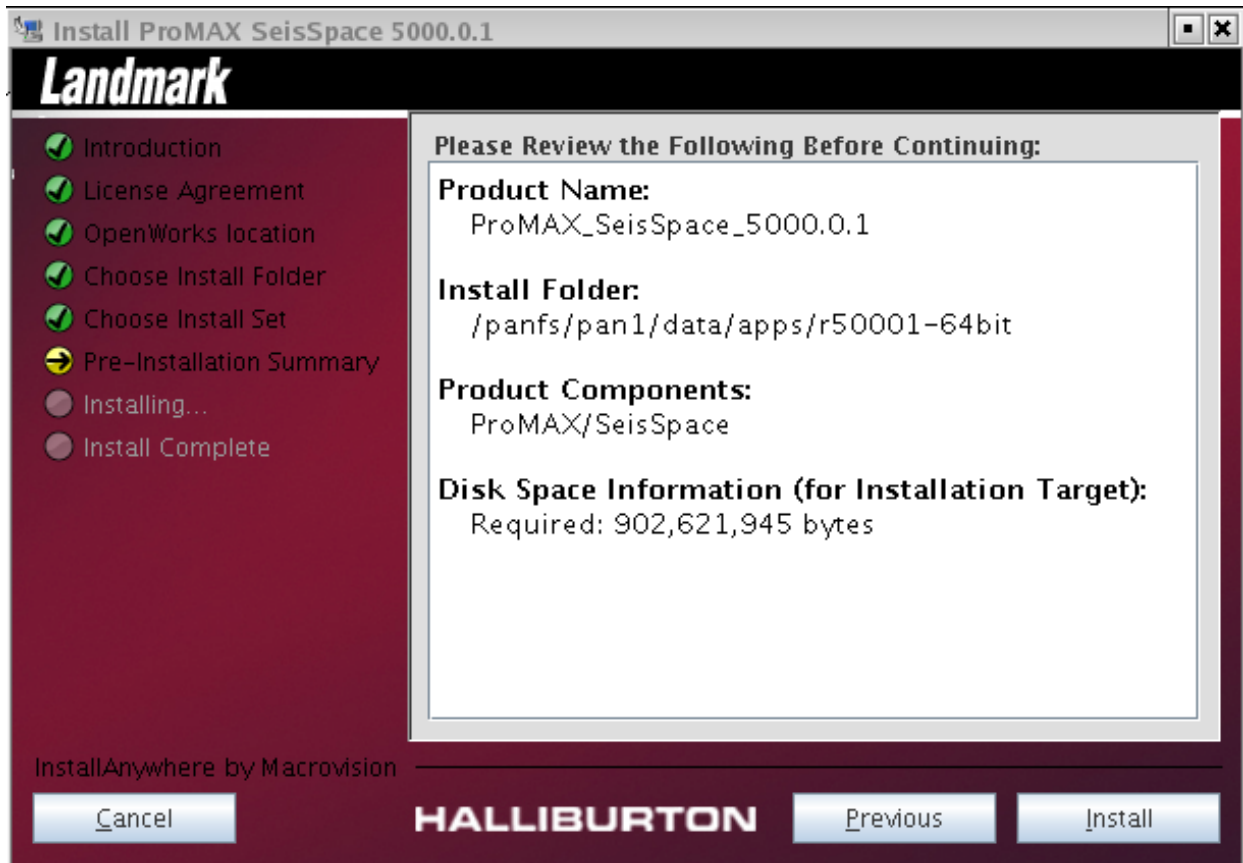
button and the following dialog will appear:



Select "Typical" and then click the **Next** button.

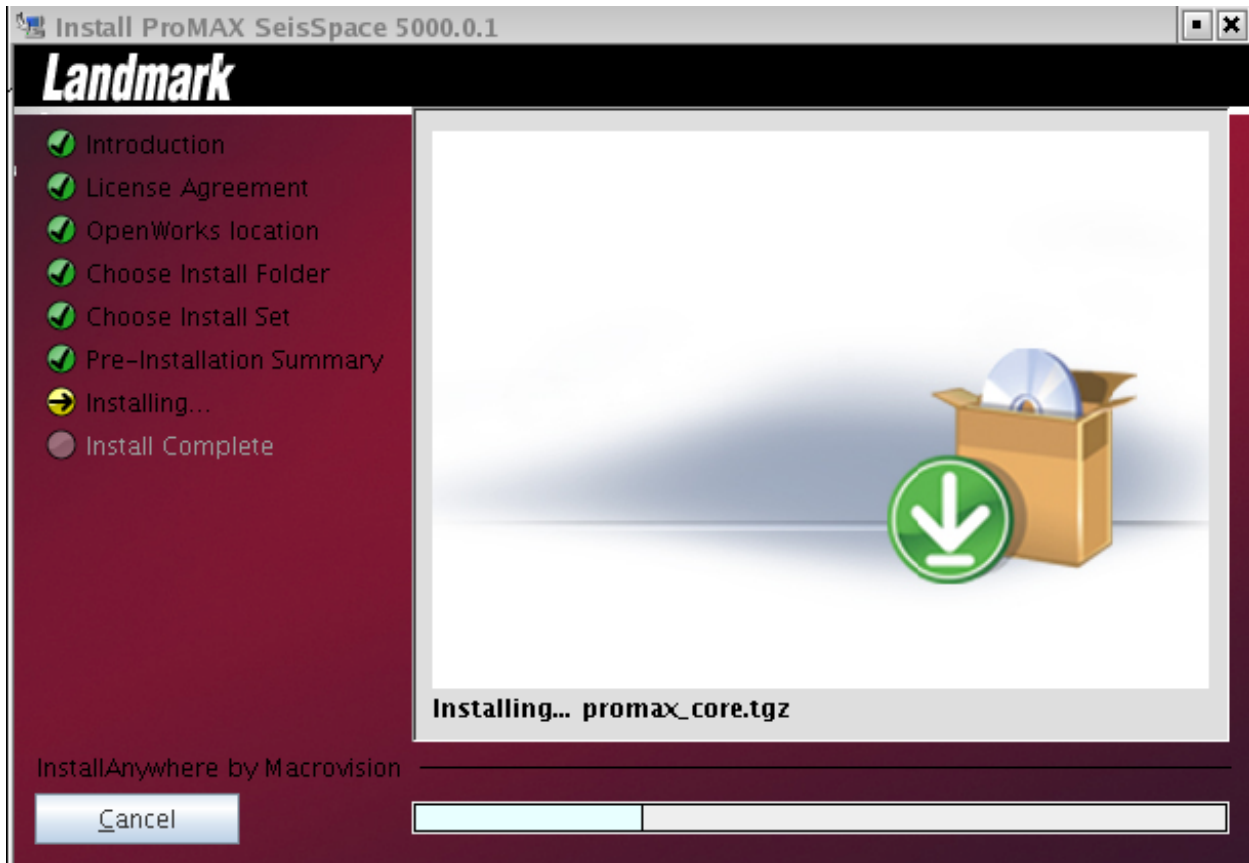
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The following dialog will appear

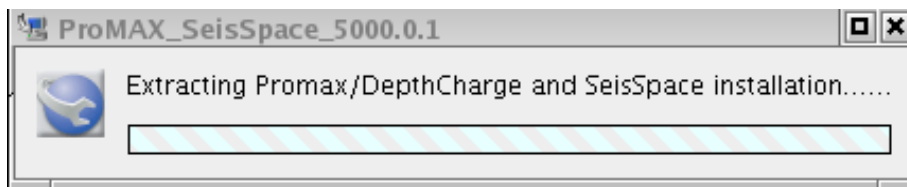


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If the summary looks correct, click the **Install** button and the following dialog will appear:

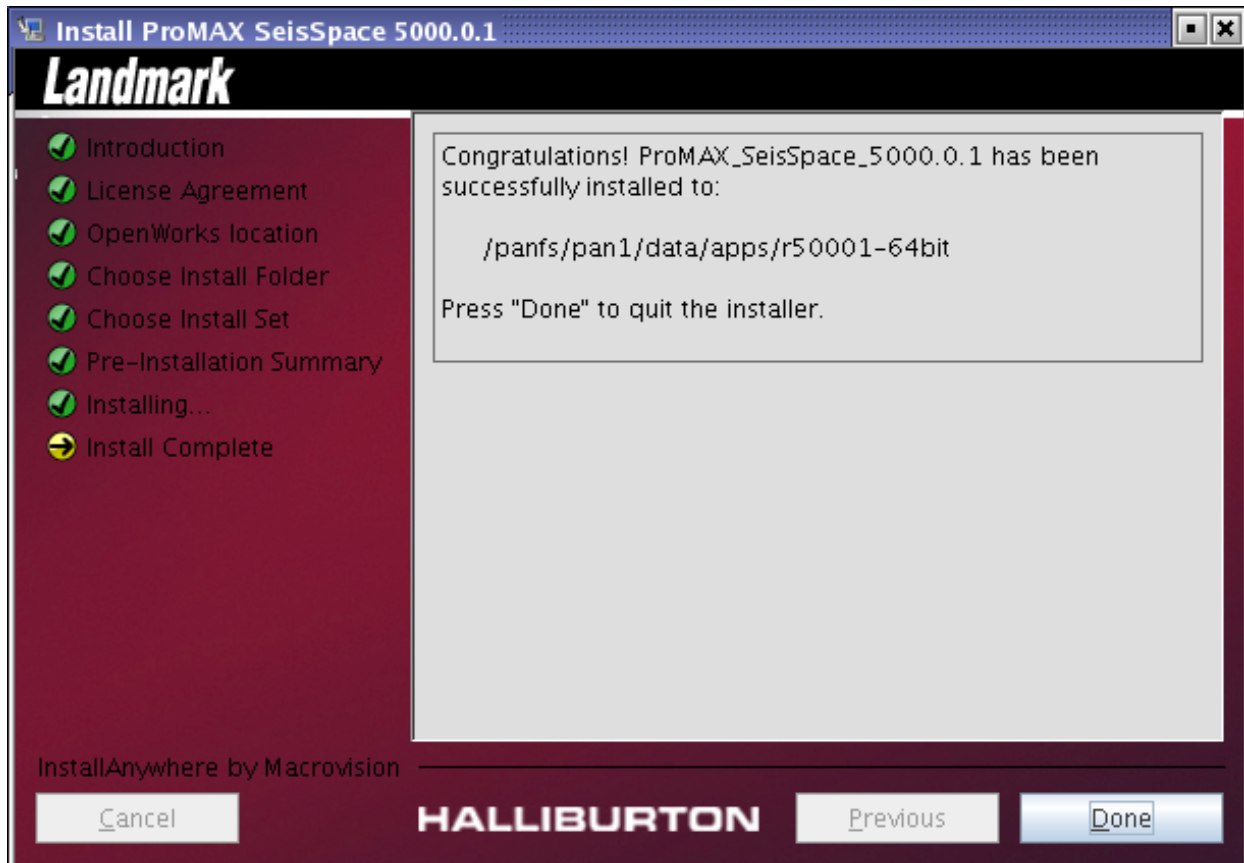


Next you will see a status bar indicating that the files are being extracted and untarred by the installer:



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When complete, the following dialog will appear:



Click on **Done** button and the installation dialogs will disappear.

Part of the installation includes the running of a post install script. For the SeisSpace®/ProMAX®/ProMAX® DepthCharge product post installation the ProMAX/install/ProMAX®Install script is run that performs a variety of operations in the ProMAX® and SeisSpace® installations.

4. Add a logs directory to the `.../apps` directory and set its permissions:

```
cd .../apps
```

```
mkdir logs
```

```
chmod -R 700 logs (set the permission to be read/write by the user who  
will be running the sitemanager - generally root)
```

The **logs** directory is used to store the *netdir.xml* file. This file is the master configuration file for the SeisSpace® installations. Keep it in a directory outside of the main installation directories to avoid deleting it when you reinstall or update the installation version later. Log files from the sitemanager are also written to this directory.

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**Note:** You may also choose to move the ProMAX® etc directory outside of the ProMAX® installation tree for safe keeping.

It is advantageous to put the following directories together under the .../apps directory:

```
.../apps/ProMAX
.../apps/revisions
.../apps/SeisSpace
.../apps/logs
.../apps/etc
.../apps/bin
```

You can store the startup and maintenance scripts in the **../apps/bin** directory.

DO NOT PROCEED UNTIL YOU HAVE RECEIVED A VALID LICENSE FILE FROM LANDMARK.

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## Licensing

### *License Manager*

This release is licensed under the FLEXlm licensing software (LAM). SeisSpace® uses ProMAX® license features for the Navigator/Flowbuilder and for running ProMAX® and SeisSpace® jobs. If you have a ProMAX® 5000.0 license running against 5000.0 LAM

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license software, then you will not need a new license file and you will not have to reinstall LAM.

**Obtaining a license to run the software**

After installing any point product, the following message will prompt you to obtain a proper licence:

Attention Landmark Customer

Please contact Landmark for your new software licenses. To receive your licenses, contact the license administration team via email ([license@lgc.com](mailto:license@lgc.com)), the World Wide Web (<http://www.lgc.com>), or phone (The America's 281-560-1110, and outside the Americas at 44-1932-832100). Please refer to the LAM 2003.3.3 Release Guide for instructions on how to retrieve your Imhostid information.

Please have the following information in your email or available when you call:

Company name: \_\_\_\_\_

Location: \_\_\_\_\_

Server Imhostid: \_\_\_\_\_ Client

Imhostid(s): \_\_\_\_\_

Server Hostname: \_\_\_\_\_

Platform: \_\_\_\_\_

Model: \_\_\_\_\_ Operating System

Version: \_\_\_\_\_

Site#: \_\_\_\_\_

Reference#: \_\_\_\_\_

Send the license to:

Name: \_\_\_\_\_

Phone#: \_\_\_\_\_

Send the license via:

email - email address \_\_\_\_\_

diskette - shipping address \_\_\_\_\_

fax - fax number \_\_\_\_\_

This window is for information only. Click on OK to continue.



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## **Activating the LAM Manager**

The LAM (or FLEXlm) executables are delivered with ProMAX® in the PROMAX\_HOME/sys/bin/flexlm directory. You can start the license server using the lmgrd command as follows:

```
$PROMAX_HOME/sys/bin/flexlm/lmgrd -c licensefile > /apps/logs/  
license.log
```

When you activate LAM, it creates a hidden file on your home directory called **.flexlmrc**. This file contains a speed-optimization to help FLEXlm locate the license file and the license server. You need to remove the file before changing your configuration.

Landmark suggests that you disable the creation of this file by including the following line in your environment file:

```
FLEXLM_NO_CKOUT_INSTALL_LIC 1
```

You will still want to use the variable:

```
LM_LICENSE_FILE /your/license.dat
```

## Configuring the System

This section discusses the system configuration items which must be verified prior to initiating a session, the ProMAX® startup routine, and ProMAX® PD troubleshooting.

### **3D Viewer**

The original ProMAX® 3D Viewer based on OpenVision is not compatible with ProMAX® R5000.0.1.0 and is not being made available for the R5000 series of releases. The SeisSpace® 3D viewer is installed with the package and no additional configuration is required.

### **ProMAX® config\_file Entries**

You can edit your site-level ProMAX® configuration file to reflect your system setup. Refer to the sample config\_file or to Overriding Environment Variable Settings in the Customizing Your System chapter of the ProMAX® System Administration Guide for details.

### **Parallel Processing**

Parallel processing from within the executive is available using Parallel Virtual Machine (PVM) technology. PVM requires a description of the network machines. This description will normally be kept in the file <PROMAX\_HOME>/etc/pvmhosts. This file should be edited to provide your site specific configuration. The pvmhosts file included with this installation provides information on the entries found in that file. You have the option of specifying your own pvmhosts file. See Setting Up Parallel Processing in the Customizing a ProMAX® Installation chapter of the ProMAX® System Administration Guide for more information.

### **Services File**

If ProMAX® has never been installed on your system, add two lines to the /etc/services file or your yp master services file. An example follows:

```
promax 1525/tcp
lgc_pd 3006/tcp pd
```

The numbers (in this case 1525 and 3006) must be unique within the file. Also, the numbers should be greater than 1023 since numbers below 1023 are privileged and

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should not be used. The number for lgc\_pd needs to be greater than 2011. If your machine or network is running NIS (Network Information Services or what used to be called Yellow Pages) you will need to include promax and lgc\_pd as services on the NIS server.

The lgc\_pd service is used by the Pointing Dispatcher (PD) for communication between many ProMAX® processes such as the Velocity Analysis and QC tools, Interactive Data Access, DBTools, Make Database Basemap, and within the MVA product.

If there is already an lgc\_pd entry in the services file from other Landmark products, you do not need to add a second lgc\_pd line.

After making the changes, the system manager needs to push the maps out on the network.

**There are cases where you may want to run multiple PD instances that are independent. In this case you can add additional lgc\_pd# lines to the services file and then address these via environment variables. For example, different PDs could be run by adding the following lgc\_pd# lines:**

promax	1525/tcp	
lgc_pd	3006/tcp	pd
lgc_pd1	3007/tcp	pd1
lgc_pd2	3008/tcp	pd2

These different PDs can be addressed using the following environment variables:

- LGC\_PD\_SERVICE lgc\_pd1
- LGC\_PD :lgc\_pd1

**Note:** Do not forget to enter the colon.

These variables should be set in the Promax or SScient startup scripts.

### ***Forcing an execution to use a specific PD***

ProMAX® uses the Pointing Dispatcher (PD) from OpenWorks™ (\$OWHOME/bin/pd). If OpenWorks™ is not installed on your machine, use ProMAX®'s Point Dispatcher (\$PROMAX\_HOME/sys/exe/lgc/pd).

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## MySQL

ProMANAGER (no longer supported by development) requires that you install and setup a MySQL database.

**Note:** For LINUX, `mysql-server-3.23.58-2.3` must be installed from the Extras CD or downloaded from Redhat or MySQL. Refer to [Setting Up and Configuring MySQL for Linux](#).

Copy, uncompress, and untar the file compatible with your system in your `/usr/local` directory. For example:

```
As UNIX root:

cp $PROMAX_HOME/sys/bin/MySQL/mysqlxx.tar.Z /usr/local/.

uncompress mysqlxx.tar.Z

tar -xvf mysqlxx.tar
```

**Note:** The binary MySQL distributions assume `/usr/local` as the parent directory. If you install under `/usr/local` you do not have to edit the scripts. However, if you choose to install in a different location, edit the following two scripts to match your installation location:

```
bin/safe_mysqld

support-files/mysql.server
```

In the `bin/safe_mysqld` script, after the ELSE statement, edit the following three lines (replacing your MySQL's installation path for `/usr/local`):

- `MY_BASEDIR_VERSION=`
- `DATADIR=`
- `ledir=`

In the `support-files/mysql.server` script, alter the following three lines (replacing your MySQL's installation path for `/usr/local`):

- `basedir=`
- `datadir=`
- `pid_file=`

Also, `chmod +x` this script to make it executable using the following command:

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```
chmod +x ./support-files/mysql.server
```

Edit (using vi or other editor) the script **./support-files/mysql.server** to add "--user=root" to line number 107.

## **Plotters**

For detailed information about how plot files are created and plotted from within the ProMAX® system, refer to the *Setting Up Plotting Software* chapter of the *ProMAX® system Administration Guide*.

## **ProManager (No longer supported by development)**

Refer to the *ProMANAGER User Guide* for the complete installation instructions.

## **Tape Catalog Directories**

Refer to the *TopCat Guide* section in the *Total Tape Solution User Guide* for a discussion of tape catalog configuration.

## **Tape Device Configuration**

The ProMAX® tape system allows you to import and export data. Processes such as **SEG-Y Input**, **Tape Data Input**, **Tape Data Output** and **SEG-Y Output** are the parts of the tape system that read and write the data. The tape configuration information, which drives the tape system, is another part of the tape system. The tape configuration information is embedded within ProMAX® and can be updated by editing the *device.tts* file.

## **ProMAX® MVA**

After you have installed SeisSpace®/ProMAX/ProMAX® DepthCharge, ProMAX® MVA is visible only in the ProMAX® DepthCharge product processes list. ProMAX® MVA now uses the DEPTHCHARGE license features.

The \$PROMAX\_HOME/port/menu/promax/Processes\_MVA file and the Processes\_MVA\_extra which contains just the ProMAX® MVA processes are still available as before to update the processes lists.

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## **ProMAX® 4D**

All of the macros contain **Disk Data Output** processes; the default is to *not* skip primary disk storage. If you want to enable the use of secondary storage, edit the *Altstore\_inc.menu* file setting the value variable to t instead of the default of nil. This will adjust the behavior of all of the 4D macros.

### **Configuration of required libraries to drive the EC (2003.12 OpenWorks) bridge ProMAX® tools.**

The following steps can be followed to copy the required libraries from your existing 2003.19.1.x ProMAX® installation to the 5000.0.1.0 installation to enable the original ProMAX® tool SeisWorks IO bridges to work with a legacy 2003.12 OpenWorks database.

NOTE: you will need to install a patch to ProMAX 2003.19.1.1 to get the most recent libraries:

Additional setup is required, as mentioned in the helpfiles of the SeisWorks I/O tools (available from the SeisSpace/ProMAX UI). The size of a SeisWorks compressed seismic dataset output from ProMAX 2003.19.1 is much larger than that of Poststack 2003 or ProMAX 2003.12.1.

Problem: The required libraries section for the Emerald City bridge mentions 2003.12 OpenWorks / 2003.19 SeisWorks. in a few places. There is no 2003.19 SeisWorks. Please update this to indicate we are referring to are the SeisWorks I/O tools which are compatible with the 2003.19 release of SeisSpace/ProMAX.

An Additional setup is required, as mentioned in the helpfiles of the SeisWorks I/O tools (available from the SeisSpace/ProMAX UI).

There is one other patch you should be aware of which needs to be installed in the SeisSpace/ProMAX 2003.19.1.1 release prior to the copying of these libraries. This patch can be found on the customer support portal in solution doc 168832.

The size of a SeisWorks compressed seismic dataset output from ProMAX 2003.19.1 is much larger than that of Poststack 2003 or ProMAX 2003.12.1.

Download the patch file lgc\_out.exe\_809251.

```
cd $PROMAX_HOME/sys/exe
```

```
cp lgc_out.exe lgc_out.exe_orig
```

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```
cp lgc_out.exe_809251 lgc_out.exe
```

```

${MKDIR} -p ${INSTALL_DIR}/ProMAX/sys/EC/lib

${CHMOD} 775 ${INSTALL_DIR}/ProMAX/sys/EC/lib

if [ "${MACHTYPE}" = "linux" ] ; then 32 bit install*****

$ECHO "Getting EC libraries from ${PM231911_32_INSTALL_DIR}/sys/lib and
syslibs"
#

cd ${INSTALL_DIR}/ProMAX/sys/EC/lib

${CP} ${PM231911_32_INSTALL_DIR}/sys/lib/libBMcarto.so .
${CP} ${PM231911_32_INSTALL_DIR}/sys/lib/libclntsh.so.8.0 .
${CP} ${PM231911_32_INSTALL_DIR}/sys/lib/libLGCbase.so .
${CP} ${PM231911_32_INSTALL_DIR}/sys/lib/libowdevkit.so .
${CP} ${PM231911_32_INSTALL_DIR}/sys/lib/syslibs/libstdc++.so.3.0.4 .
${LN} -s libstdc++.so.3.0.4 libstdc++.so.3
${CP} ${PM231911_32_INSTALL_DIR}/sys/lib/libwtc8.so .
${CP} ${PM231911_32_INSTALL_DIR}/sys/lib/syslibs/libXm.so.2 .
#${LN} -s libXm.so.2 libXm.so.2.1

fi

else 64 bit install *****

$ECHO "Getting EC libraries from ${PM231911_64_INSTALL_DIR}/sys/lib/lib32 and
${OWHOME2312}/lib"

cd ${INSTALL_DIR}/ProMAX/sys/EC/lib

${CP} ${PM231911_64_INSTALL_DIR}/sys/lib/lib32/libBMcarto.so .
${CP} ${PM231911_64_INSTALL_DIR}/sys/lib/lib32/libclntsh.so.8.0 .
${CP} ${PM231911_64_INSTALL_DIR}/sys/lib/lib32/libLGCbase.so .
${CP} ${PM231911_64_INSTALL_DIR}/sys/lib/lib32/libowdevkit.so .
${CP} ${PM231911_64_INSTALL_DIR}/sys/lib/lib32/libstdc++.so.3 .
${CP} ${PM231911_64_INSTALL_DIR}/sys/lib/lib32/libwtc8.so .
${CP} ${PM231911_64_INSTALL_DIR}/sys/lib/lib32/libgpr_ctk.so .

fi

cd ${INSTALL_DIR}/ProMAX/sys/EC/lib

${CP} ${OWHOME2312}/lib/libXm.so.2 .

fi
fi
```

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# Running ProMAX®, SeisSpace®, and ProMAX® DepthCharge Software

## ***Starting ProMAX® and ProMAX® DepthCharge via the ProMAX® UI.***

NOTE: The ProMAX® UI and ProMANAGER are no longer supported by the SeisSpace®/ProMAX®/ProMAX® DepthCharge development group. The support staff will continue to support these components for usage questions, but there will be no fixes or enhancements made to these components by the development group.

At this point, you should have installed SeisSpace®/ProMAX®/ProMAX® DepthCharge and verified the system configuration items. ProMAX® requires setting of several environment variables prior to execution. To help facilitate the proper setting of the execution environment, we provide the `$PROMAX_HOME/port/bin/Promax` script.

## **Setting Environment Variables by Script**

In general, the best means of ensuring that the environment is set properly is to use this script, but there are some environmental variables that can be set manually. These include:

- DISPLAY
- PROMAX\_HOME
- PROMAX\_DATA\_HOME
- PROMAX\_SCRATCH\_HOME
- any extended PROMAX\_SCRATCHX#\_HOME variables
- LM\_LICENSE\_FILE

In addition to these, you may also elect to use a special `config_file` or `pvmhosts` file; or you may elect to use a different `.promax` file when working in the development environment. These optional entries can be set with the following variables:

- PROMAX\_ETC\_CONFIG\_FILE\_HOME
- PROMAX\_ETC\_PVMHOSTS\_HOME
- PROMAX\_DOT\_PROMAX\_HOME

We suggest using a start up script similar to that shown below:

```
#!/bin/sh
export DISPLAY=my_machine:0.0
export PROMAX_HOME=/swdisk/ProMAX
```

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```
export PROMAX_DATA_HOME=/data
export PROMAX_SCRATCH_HOME=/scratch
export LM_LICENSE_FILE=/etc/license.dat
$PROMAX_HOME/port/bin/Promax -o 3d
#end
```

The following steps explain the `$PROMAX_HOME/port/bin/Promax` script:

1. Set the display environment variable.

You will need to ensure that the display environment variable is set to your display monitor. C shell users can type the following command to set the variable:

```
% setenv DISPLAY <hostname>:0
```

Bourne, Korn and bash shell users can type the following:

```
$ export DISPLAY=<hostname>:0
```

**Note:** Substitute the name of your workstation or X terminal for `<hostname>`. As with all environment variables, you can run these commands manually, as part of a script, or you can include them in your `.cshrc` or `.login` file.

2. Make sure your ProMAX® environment variables are properly set.

The base environment variable is `$PROMAX_HOME`. Your `$PROMAX_HOME` environment variable for installation ends in `/ProMAX`. For example, if you install ProMAX® from `/disk2`, you will have to set the following environment variable:

```
% export PROMAX_HOME=/disk2/ProMAX
```

All other ProMAX® files would reside under `/disk2/ProMAX`, following the standard ProMAX® directory structure. Given that all files reside under the standard directory structure, you will not have to set any other environment variables specific to ProMAX®.

However, you can use other environment variables to override default locations for specific files. For example, you might change the location of the ProMAX® scratch directory or specify a user-specific variable for a primary data storage area, overriding the one found in the ProMAX® `config_file`.

All ProMAX® environment variables start with `PROMAX`, end with `HOME`, and have the normal ProMAX® directory path inserted between them, separated by underscores. To point to a different primary data storage area, ProMAX® would be initiated with the `$PROMAX_DATA_HOME` environment variable. For example:

```
% export PROMAX_DATA_HOME=/extdisk/data
```

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will use /extdisk/data as a primary data storage override.

```
% export PROMAX_SCRATCH_HOME=/scratch
```

will use /scratch as a primary scratch directory. NOTE: this should in general be a directory on a local disk on each individual node of a cluster and must be the same directory name on all of the nodes.

For a more extensive listing of ProMAX®-specific environment variables, please refer to *Setting the User Environment* in the *Customizing a ProMAX® Installation* chapter of the *ProMAX® System Administration Guide*.

```
% export LM_LICENSE_FILE=/etc/license.dat
```

ProMAX® uses the FLEXlm licensing software and it is necessary to specify the appropriate license file. You can place the license file anywhere, as long as the file can be read from the machine where the programs are being executed.

## Linux Redhat AWS

If you are running Redhat AWS, you'll also need to set the language environment variable in the ProMAX® startup script. For example:

```
% setenv LANG en_US
```

Failing to set this variable may cause problems with the file browsing outside the default directory.

## Initiating a Session

You can initiate the ProMAX® startup routine by executing the supplied startup script in any one of the following manners:

### ProMAX® 2D:

```
% $PROMAX_HOME/port/bin/Promax &
```

### ProMAX® 3D:

```
% $PROMAX_HOME/port/bin/Promax -o 3d &
```

### ProMAX® 4D:

```
% $PROMAX_HOME/port/bin/Promax -o 4d &
```

### ProMAX® VSP:

```
% $PROMAX_HOME/port/bin/Promax -o vsp &
```

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### ProMAX® DepthCharge:

```
% $PROMAX_HOME/port/bin/Promax -o dc&
```

### ProMAX® Field

```
% $PROMAX_HOME/port/bin/Promax -o field&
```

You can change products from within the User Interface by selecting "Product" from the Flow window.

## ***Launching ProMAX® from the OpenWorks™ Launcher***

You can launch ProMAX® from the OpenWorks™ launcher by following these steps:

1. Check your launcher.dat file in your user home directory. Under Applications, it should look like the following:

```
``ProMAX`` ``ProMAX 2>$HOME/run/Promax.err 1> &2 &``
```

ProMAX® accesses the ./port/bin/ProMAX script. However, you can enter the path to a personal script. Make sure that the script points to the correct library paths.

2. Edit the .lgclogin file to point to the correct PROMAX\_HOME. After the following text:

```
#=====
#Landmark application specific environment variables. Build the
PATH and
#HOME directories for all installed Landmark Applications.
"Product listing"
```

Add the following information:

```
if ( -d $)OWHOME/ProMAX ) then
setenv PROMAX_HOME ${OWHOME}ProMAX
set path = ( ${path} ${PROMAX_HOME}/port/bin)
endif
```

3. CD to \$OWHOME

As UNIX root:

```
mkdir PROMAX
```

4. Logout and log back in as your user. Type:

```
env
```

Check the path for the ProMAX® software. On some machines, the path gets truncated because of the number of products listed in the .lgclogin. If this happens, reduce the number of products or place ProMAX® in the front of the list:

```
:/apps/ProMAX/port/bin:/apps/SeisWorks/bin:/apps/SeisUtil/bin:/  
apps/GeoDataLoad/bin:/disk/frame/bin:/apps/PostStack/bin
```

5. Start **OpenWorks™** and **Select Applications ->ProMAX.**

## Setting Environment Variables Manually

The following are the required environment variables that need set, if you choose not to use the supplied startup script:

## X-Window Resource Files

**Note:** The port/bin/Promax script automatically sets all of these.

Set the environment variable XFILESEARCHPATH to find the application default files for ProMAX® applications. These files are in the <PROMAX\_HOME>/port/lib/X11/app-defaults directory. The following is an sh example for all computers:

```
% export XFILESEARCHPATH=<PROMAX_HOME>/port/lib/X11/%T/%N%S
```

**Note:** You can edit and customize X resource files. For more information about X-window resources see *Changing the Behavior of Programs* in the *Customizing a ProMAX® Installation* chapter of the *ProMAX® System Administration Guide*.

## Runtime Libraries

The ProMAX® User Interface along with several other executables have been dynamically linked against the runtime libraries found in the directory <PROMAX\_HOME>/sys/lib and in other system directories. You will need to include the /sys/lib/ directory in your LIBPATH or LD\_LIBRARY\_PATH environment variables.

**For more details on setting platform-specific libraries, refer to the example files in**

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**\$PROMAX\_HOME/port/bin/ProMAX.**

## OpenWorks™ Home

ProMAX® requires that the OpenWorks™ environment variable, OWHOME, be set. This must point to a valid OpenWorks™ installation, or to <PROMAX\_HOME>/port/OpenWorks™. An sh example with a valid OpenWorks™ installation:

```
% export OWHOME=/apps/landmark/OpenWorks
```

An sh example without a valid OpenWorks™ installation:

```
% export OWHOME=<PROMAX_HOME>/port/OpenWorks
```

## PVM

ProMAX® uses the Parallel Virtual Machine software. As a result, an environment variable needs to be set and the PATH environment variable modified. PVM\_ROOT should be set to <PROMAX\_HOME>/sys. An sh example:

```
% export PVM_ROOT=<PROMAX_HOME>/sys
```

## PATH

ProMAX® requires three directories to be in the user's execution search path. To accomplish this, the PATH environment variable needs to be modified by adding <PROMAX\_HOME>/sys/bin, <PROMAX\_HOME>/sys/exe and <PROMAX\_HOME>/sys/exe/frame/bin. An sh example:

```
% export PATH=<PROMAX_HOME>/sys/bin:\
<PROMAX_HOME>/sys/exe:\
<PROMAX_HOME>/port/bin:${PATH}
```

## *Initiating a Session*

If you prefer to set all the necessary environment variables on your own, you can then initiate ProMAX® by executing any one of the following:

### **ProMAX® 2D:**

```
% $PROMAX_HOME/port/bin/Promax &
```

[← Go To "What's in this Release?"](#)**ProMAX® 3D:**

```
% $PROMAX_HOME/port/bin/Promax -o 3d &
```

**ProMAX® 4D:**

```
% $PROMAX_HOME/port/bin/Promax -o 4d &
```

**ProMAX® VSP:**

```
% $PROMAX_HOME/port/bin/Promax -o vsp &
```

**ProMAX® DC**

```
% $PROMAX_HOME/port/bin/Promax -o dc&
```

**ProMAX® Field**

```
% $PROMAX_HOME/port/bin/Promax -o field&
```

The last two files (executables) each link back to the actual executable file `$PROMAX_HOME/sys/bin/promax`. The product-specific entries initiate the same User Interface, but bring up product-specific menu items. They also place you under the specific product's version of the User Interface.

## ***Starting the SeisSpace® software***

### **Overview**

This section discusses building startup scripts, starting the sitemanager, and starting the SeisSpace® software.

Below is a summary of the steps needed to start and run SeisSpace®:

- Build (or copy and edit) the startup scripts
- (Optionally) Start the sitemanager - See details below
- Start the SeisSpace® Navigator
- Perform any shared administration functions, such as shared host lists, projects, and Queues

**Note:** SeisSpace® is dependent on ProMAX®. You must have a fully-functional ProMAX® installation prior to configuring SeisSpace®. This installation installs SeisSpace®, ProMAX® and ProMAX® DepthCharge in one step.

## Starting the managers

One of the major changes for SeisSpace® R5000 relative to previous releases is that the use of a centralized sitemanager is now optional. The instructions below will still guide you through the steps to set up the sitemanager in the case where you would want to use it.

You would still want to use the centralized sitemanager if you are working in a multi-user environment and you want the users to have access to each others job status information and have all of the jobs for all of the users managed in one central location. You would also want to run an external (centralized) sitemanager if you want to submit a series of chained jobs and then need to kill the navigator, but you want the chained jobs to submit when their precursors flows have completed. If you run in a single user environment and are not concerned with the other users or not concerned about having chained jobs run from one Navigator session to another, then you are not required to run the sitemanager and you can just run the Navigator with an internal (embedded) sitemanager that only exists while the navigator is running.

### *Building startup scripts*

To start the sitemanager, you must build the startup script `.../apps/bin/sitemgr` where you will add in some environment variables and then call the production start up scripts from the installation directory.

DO NOT COPY THE sitemanager SCRIPTS FROM YOUR PROWESS\_HOME/port/bin directories as a starting point. These are the production startup scripts that will probably change from release to release and with patches. Make new scripts as described below. You can easily make these new scripts by copying the examples provided in the \$PROWESS\_HOME/etc directory. These scripts are called `.../SeisSpace/etc/sitemgr`, and `.../SeisSpace/etc/SSclient` or `SSclient-InternalSm`.

1. Change directory to the `.../apps/bin` directory and copy the \$PROWESS\_HOME/etc/sitemgr, SSclient and SSclient-InternalSM scripts here. You will build the scripts in this directory.
2. The example *sitemgr* script in `.../SeisSpace/etc` is shown below:

**Note:** Lines beginning with "#change#" indicate variables whose value you will need to supply. Lines beginning with "#default#" indicate variables that have a default value that you may want to change. Lines beginning with "#optional#" are optional and do not have a default value.

```
#!/bin/bash

# This script sets up some environment variables, then calls the
# system sitemanager script to start and stop a sitemanager for
# SeisSpace. There is usually only one sitemanager. Multiple
# clients can connect to this sitemanager.

# Usage: sitemgr [start|stop|restart] [purge -age value]
```



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```
# Job status information is stored in perpetual files so that when a
sitemanager
# is restarted it will show the jobs that were submitted before.
# The list of jobs can become quite long. If you want to you can recycle
(restart) the
# sitemanager use the purge option to delete any completed jobs older than
# "value" days hours or minutes using the 100d 100h or 100m syntax as an
example.

# Lines beginning with "export" indicate variables whose value you'll
# need to supply. Lines beginning with "#default#" indicate variables
# that have a default value that you may want to change. Lines beginning
# with "#optional#" are optional and do not have a default value.
#=====

export PROWESS_HOME=/a/b/c/apps/r5000-64bit/SeisSpace

# Specify where SeisSpace was installed.

#####
export PROMAX_HOME=/a/b/c/apps/r5000-64bit/ProMAX

# Specify where ProMAX was installed.

#####
#default# export PROWESS_PORT=5006

# You can run multiple sitemanagers by using different port numbers.
# Use higher numbered ports to avoid conflicts eg. you can run
# SeisSpace R5000.0 on port 5000.

#####
#default# export PROWESS_LOGDIR=$PROWESS_HOME/./logs

# Specify the path to the logs directory. This is where you'll find
# log files as well as the netdir.xml file for the sitemanager.
#
#####
#optional# export PROWESS_ETC_HOME=$PROWESS_HOME/./SSetc
# Specify the path to the SeisSpace etc directory.
# If you moved the etc dir from PROWESS_HOME/etc
#
#####
# SM_XMX (Maximum Java Heap Size)
# The default value for the SiteManager is 1024m but
# can be modified with the export below.
#export SM_XMX=4096m
#
#####
# Execute the system sitemanager script. Do not change this line!
$PROWESS_HOME/port/bin/sitemanager $@
```

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### 3. The **SSclient** script in `.../SeisSpaceClient/etc` is shown below:

**Note:** Lines beginning with "#change#" indicate variables whose value you will need to supply. Lines beginning with "#default#" indicate variables that have a default value that you may want to change. Lines beginning with "#optional#" are optional and do not have a default value.

```
#!/bin/bash

# THIS SCRIPT IS FOR WHEN RUNNING WITH AN EXTERNAL/CENTRALIZED SITEMANAGER
export SM_STATE=EXTERNAL

# This script sets up some environment variables, then calls the
# system client script to start the SeisSpace client. The client
# connects to a sitemanager.

# Usage: SSclient [-o product ID]

# Lines beginning with "export" indicate variables whose value you'll
# need to supply. Lines beginning with "#default#" indicate variables
# that have a default value that you may want to change. Lines beginning
# with "#optional#" are optional and do not have a default value.
#=====

export PROWESS_HOME=/panfs/pan1/data/apps/r5000-64bit/SeisSpace

# Specify where SeisSpace was installed. This should
# should already be set to the installation directory you specified to
# the CD installer. This variable is used internally by this script to
# determine the location of the system SeisClient.sh script.

#####
export PROMAX_HOME=/panfs/pan1/data/apps/r5000-64bit/ProMAX

# Because the client accesses ProMAX data, it needs to know where to
# find the associated ProMAX installation. The ProMAX and SeisSpace
# versions need to be compatible.

#####
export PROWESS_HOST=<hostname>
export PROWESS_PORT=5006

# When working with centralized sitemanager that is running as root
# it is the combination of PROWESS_HOST and PROWESS_PORT that tells the
navigator
# which centralized sitemanager to connect to. The port is defined in the
sitemgr
# script. When you are connecting to a centralized sitemanager you need to set
# PROWESS_HOST and PROWESS_PORT to match the host and port where the
sitemanager
```

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```
# is running

#####
#export PROWESS_ETC_HOME=$PROWESS_HOME/etc

# You can change where the navigator looks for:
#   site-wide submit parameter files (etc/SeisSpace/*.submitXML)
#   menu parameter defaulting flow files (etc/defaultdatahom/defaultarea/
defaultline/*)
#   properties files (e.g. etc/prowess.properties)
#   new table types (etc/flowbuilder/TableTypes.txt)
#
# This can be multi-pathed. The navigator will always add
# $PROWESS_HOME/etc to the end of this path. The properties files
# under your PROWESS_ETC_HOME do not need to be complete copies of
# the originals under $PROWESS_HOME/etc; they need only contain
# changes that differ from the originals. Although it is also possible to
# redefine the basic list of SeisSpace processes (etc/flowbuilder/PROWESS.xml)
# this is not recommended because you will fail to receive any updates to this
# list from future installations of SeisSpace.
#
# The default is $PROWESS_HOME/etc.

#####
export PROWESS_PREFS_DIR=$PROWESS_HOME/./userprefs/'whoami'/SeisSpace

# The directory that contains the SeisSpace preferences file .seisspace
# and the archive_state.xml file
# The system default is $HOME/SeisSpace. This variable allows you to
# use different .seisspace files for different versions
# of SeisSpace. You will find that the .seisspace file for 2003.19.1.1
# and r5000 are different and incompatible.
# You may put the user preference file in a centralized location
# by setting this to $PROWESS_HOME/./userprefs/'whoami'/SeisSpace for
example.

#####
export LM_LICENSE_FILE=<license.dat>

# Specify the full path to the license file that serves ProMAX UI license
# features. The client checks out ProMAX UI license features.

#####
export SS_O_DIRECT=true

# The SS_O_DIRECT variable controls whether or not DIRECT_IO is used
# when reading and writing JavaSeis datasets. If stripes are showing
# up in the foldmap for a JavaSeis dataset that was written on multiple
# nodes or if there are parts of the dataset missing then set SS_O_DIRECT
# to 'true'. If writing to a JavaSeis dataset fails immediately with
# an error about not being able to write then set SS_O_DIRECT=false.
```

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```
#####
#optional# export GEOPROBE_PROJECT_DIR=<geoprobe_project_directory>

# ProMAGIC uses this variable, if it is set, to automatically populate
# its menus.

#####
#default# export OWHOME=$PROMAX_HOME/port/OpenWorks

# Specify where OpenWorks is installed. Or use it to
# change where the SeisWorks bridges (eg. SeisWorks input) look for
# configuration files.

#####
#default# export PROMAX_ARCHIVE_HOME=$PROMAX_HOME/archive

# Specify a default path to write Archive files from the Archive Wizard
# the default is PROMAX_HOME/archive which does not exist so you should
# change this to some directory set aside specifically for writing
# archive files to disk

#####
#optional# export PROWESS_DDF=$OWHOME/conf/dir.dat
#optional# export OW_DDF=$OWHOME/conf/dir.dat
#default# export OW_PMPATH=$OWHOME/conf

# Specify the location of the JavaSeis secondary storage dir.dat file
# By default, this will be discovered from these environment variables in this
# order of precedence: $PROWESS_DDF $OW_DDF OW_PMPATH/dir.dat $OWHOME/conf/
# dir.dat

# The SeisSpace navigator will optionally search for a file in the data_home
# directory
# defined by the environment variable:

#optional# JAVASEIS_DOT_SECONDARY_OVERRIDE=.secondary_test
# This is a method where an administrator can change the secondary storage
# specification for a DATA_HOME for testing to do things like test new disk
# partitions
# before putting them into production without affecting the users.

#####
#optional# export PROMAX_TOPCAT_HOME=<tape_catalog_location>

# Set this if you plan to access data from a tape catalog set.
# Also use "ProMAX Data Home->Properties" to specify this
# environment variable to a tape job during runtime.

#####
#optional# export PBS_BIN=/usr/local/bin

# Set the location of the PBS binaries (eg qsub) if they are NOT in
```

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```
# the default location of /usr/local/bin.

#####
#optional# export LGC_JAVA_XMX=256m

# Set the memory allocation for the navigator. 256 meg is the default if not
# specified. You may need to increase this value if you submit jobs with a
# lot of processes in them or if you try to do fold maps on large 3D framework
# JavaSeis datasets. Typical values you could use would be 512m or 1024m

#####
# export ACRO_INSTALL_DIR=/a/b/c/adobe/bin

# set the installation directory for Acrobat if you have it installed
# and want to use it as the pdf viewer for help files

#####

# export SEISSPACE_TRACE_DISPLAY_COLOR_PALETTE=Greyscale
# export SEISSPACE_TRACE_DISPLAY_COLOR_PALETTE=RedWhiteBlue
# export SEISSPACE_TRACE_DISPLAY_COLOR_PALETTE=2_BlueWhiteBrown
# export SEISSPACE_TRACE_DISPLAY_COLOR_PALETTE=BlackWhiteRed
# export SEISSPACE_TRACE_DISPLAY_COLOR_PALETTE=SEGPolar
# export SEISSPACE_TRACE_DISPLAY_COLOR_PALETTE=0_Spectrum

# Set one of these if you do not want the SeisSpace Trace Display
# tool to default to wiggle trace but rather prefer to use a
# variable density scheme. Names are case sensitive. Additional
# valid names can be obtained from the application itself --
# the color palette editor shows the names.

#####
# Execute the system client script
$PROWESS_HOME/port/bin/seisclient $* &
```

**The alternative Client start up script for running with the Internal sitemanager is shown below. The difference is in the setting of the PROWESS\_PORT variable. In this script the port value is automatically set based on a random number method to minimize the change that multiple users from getting the same port for their individual internal sitemanagers.**

```
#!/bin/bash

# THIS SCRIPT IS FOR WHEN RUNNING WITH AN INTERNAL SITEMANAGER
export SM_STATE=INTERNAL

# This script sets up some environment variables, then calls the
# system client script to start the SeisSpace client. The client
# connects to a sitemanager.

# Usage: SSclient-InternalSM [-o product ID]

# Lines beginning with "#change#" indicate variables whose value you'll
# need to supply. Lines beginning with "#default#" indicate variables
```

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```
# that have a default value that you may want to change. Lines beginning
# with "#optional#" are optional and do not have a default value.
#=====

export PROWESS_HOME=/panfs/pan1/data/apps/r5000-64bit/SeisSpace

# Specify where SeisSpace was installed. This should
# should already be set to the installation directory you specified to
# the CD installer. This variable is used internally by this script to
# determine the location of the system SeisClient.sh script.

#####
export PROMAX_HOME=/panfs/pan1/data/apps/r5000-64bit/ProMAX

# Because the client accesses ProMAX data, it needs to know where to
# find the associated ProMAX installation. The ProMAX and SeisSpace
# versions need to be compatible.

#####
export PROWESS_HOST='hostname'

# set this to localhost if you want to run with an embedded sitemanager
# i.e. there is no centralized sitemanager running as root anywhere
# and use the 'whoami' extension to the log directory path for the user
# specific netdir files and logs.

## Generate a random PROWESS_PORT
#####
## This will make it is unlikely that there will be a collision between this
## test run and another instance of SeisSpace also running on this machine.
myrand=$RANDOM          ## start with a random number between 0 and 32767
if [ "$myrand" = "" ] ; then
    myrand='date +%S'    ## or a random number between 0 and 59
fi
myrand='expr $myrand % 100'      ## get last two digits
PROWESS_PORT='expr 28000 + $myrand' ## get a port number in the 28000s
export PROWESS_PORT

#####
export PROWESS_LOGDIR=$PROWESS_HOME/../../logs/'whoami'

# When running in a single user environment where there is no
# centralized sitemanager you will need to specify the path to a logs
# directory.
# for the embedded sitemanager in each navigator.
# Landmark recommends that you add 'whoami' to a consistent path as
# a way of separating the files for individual users.

#####
#export PROWESS_ETC_HOME=$PROWESS_HOME/etc

# You can change where the navigator looks for:
```

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```
# site-wide submit parameter files (etc/SeisSpace/*.submitXML)
# menu parameter defaulting flow files (etc/defaultdatahom/defaultarea/
defaultline/*)
# properties files (e.g. etc/prowess.properties)
# new table types (etc/flowbuilder/TableTypes.txt)
#
# This can be multi-pathed. The navigator will always add
# $PROWESS_HOME/etc to the end of this path. The properties files
# under your PROWESS_ETC_HOME do not need to be complete copies of
# the originals under $PROWESS_HOME/etc; they need only contain
# changes that differ from the originals. Although it is also possible to
# redefine the basic list of SeisSpace processes (etc/flowbuilder/PROWESS.xml)
# this is not recommended because you will fail to receive any updates to this
# list from future installations of SeisSpace.
#
# The default is $PROWESS_HOME/etc.

#####
export PROWESS_PREFS_DIR=$HOME/SeisSpace

# The directory that contains the SeisSpace preferences file .seisspace.
# This defaults to $HOME/SeisSpace. This variable allows older versions
# of SeisSpace to access their own .seisspace files for compatibility.
# You may put the user preference file in a centralized location
# by setting this to $PROWESS_HOME/./userprefs/'whoami' for example.

#####
export LM_LICENSE_FILE=<license.dat>

# Specify the full path to the license file that serves ProMAX UI license
# features. The client checks out ProMAX UI license features.

#####
export SS_O_DIRECT=true

# The SS_O_DIRECT variable controls whether or not DIRECT_IO is used
# when reading and writing JavaSeis datasets. If stripes are showing
# up in the foldmap for a JavaSeis dataset that was written on multiple
# nodes or if there are parts of the dataset missing then set SS_O_DIRECT
# to 'true'. If writing to a JavaSeis dataset fails immediately with
# an error about not being able to write then set SS_O_DIRECT=false.

#####
#optional# export GEOPROBE_PROJECT_DIR=<geoprobe_project_directory>

# ProMAGIC uses this variable, if it is set, to automatically populate
# its menus.

#####
#default# export OWHOME=$PROMAX_HOME/port/OpenWorks

# Rpecify where OpenWorks is installed. Or use it to
```

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```
# change where the SeisWorks bridges (eg. SeisWorks input) look for
# configuration files.

#####
#default# export PROMAX_ARCHIVE_HOME=$PROMAX_HOME/archive

# Specify a default path to write Archive files from the Archive Wizard
# the default is PROMAX_HOME/archive which does not exist so you should
# change this to some directory set aside specifically for writing
# archive files to disk

#####
#optional# export PROWESS_DDF=$OWHOME/conf/dir.dat
#optional# export OW_DDF=$OWHOME/conf/dir.dat
#default# export OW_PMPATH=$OWHOME/conf

# Specify the location of the JavaSeis secondary storage dir.dat file
# By default, this will be discovered from these environment variables in this
# order of precedence: $PROWESS_DDF $OW_DDF OW_PMPATH/dir.dat $OWHOME/conf/
dir.dat

#optional# JAVASEIS_DOT_SECONDARY_OVERRIDE=.secondary_test
# This is a method where an administrator can change the secondary storage
# specification for a DATA_HOME for testing to do things like test new disk
partitions
# before putting them into production without affecting the users.

#####
#optional# export PROMAX_TOPCAT_HOME=<tape_catalog_location>

# Set this if you plan to access data from a tape catalog set.
# Also use "ProMAX Data Home->Properties" to specify this
# environment variable to a tape job during runtime.

#####
#optional# export PBS_BIN=/usr/local/bin

# Set the location of the PBS binaries (eg qsub) if they are NOT in
# the default location of /usr/local/bin.

#####
#optional# export LGC_JAVA_XMX=256m

# Set the memory allocation for the navigator. 256 meg is the default if not
# specified. You may need to increase this value if you submit jobs with a
# lot of processes in them or if you try to do fold maps on large 3D framework
# JavaSeis datasets. Typical values you could use would be 512m or 1024m

#####

# export ACRO_INSTALL_DIR=/a/b/c/adobe/bin
```



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```
# set the installation directory for Acrobat if you have it installed
# and want to use it as the pdf viewer for help files
```

```
#####
```

```
# export SEISSPACE_TRACE_DISPLAY_COLOR_PALETTE=Greyscale
# export SEISSPACE_TRACE_DISPLAY_COLOR_PALETTE=RedWhiteBlue
# export SEISSPACE_TRACE_DISPLAY_COLOR_PALETTE=2_BlueWhiteBrown
# export SEISSPACE_TRACE_DISPLAY_COLOR_PALETTE=BlackWhiteRed
# export SEISSPACE_TRACE_DISPLAY_COLOR_PALETTE=SEGPolar
# export SEISSPACE_TRACE_DISPLAY_COLOR_PALETTE=0_Spectrum
```

```
# Set one of these if you do not want the SeisSpace Trace Display
# tool to default to wiggle trace but rather prefer to use a
# variable density scheme. Names are case sensitive. Additional
# valid names can be obtained from the application itself --
# the color palette editor shows the names.
```

```
#####
```

```
# Execute the system client script
$PROWESS_HOME/port/bin/seisclient $* &
```

#### 4. Add execute permission to these two files.

**Note:** The sitemanager script takes an input argument. This argument is passed to the main \$PROWESS\_HOME/port/bin/sitemanager script. The argument can be **start**, **stop**, or **restart**.

### Starting the sitemanager

If you plan to run in a multiple user environment then the sitemanager must be run as root. An individual user can run a separate sitemanager as that user on a different port than the root sitemanager and point to a different netdir.xml and logs directory. Start the sitemanager with the sitemgr script:

```
..../apps/bin/sitemgr start
```

Text similar to the following appears in the window:

```
[1] 380
--- Starting Sitemanager with:
PROWESS_HOST=hostname
PROWESS_PORT=port_number
PROWESS_HOME=/apps/SeisSpace
--- Sitemanager started with PGID 98765.
saved PGID to /apps/logs/sitemanager_root_hostname_port.pgid
output logged to /apps/logs/sitemanager_root_hostname_port.log
PROMAX_HOME=/apps/r5000-64bit/ProMAX
PROWESS_PORT=port
PROWESS_LOGDIR=/apps/r5000-64bit/logs
```

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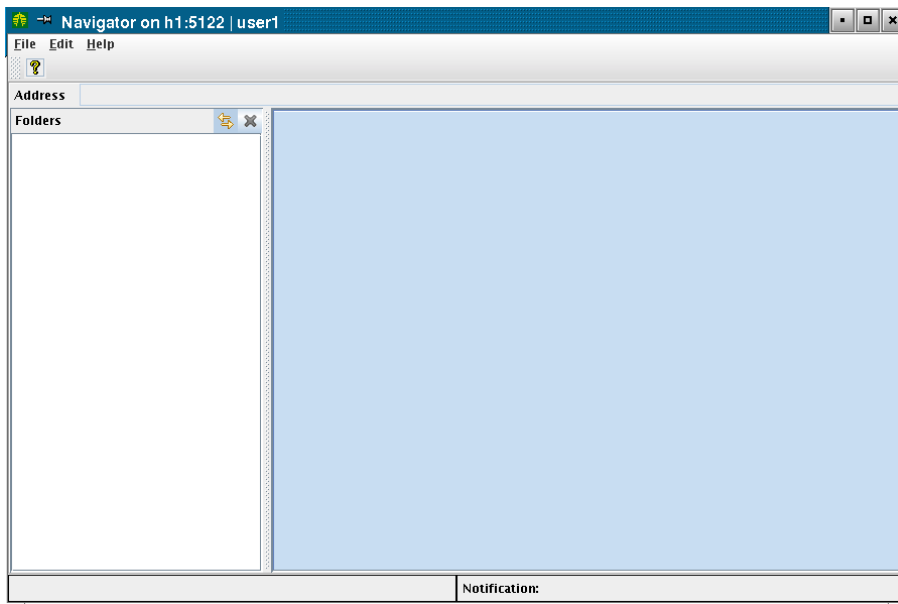
```
PROWESS_HOME=/apps/r5000-64bit/SeisSpace
```

## Starting the SeisSpace® Navigator

5. As a non-root, administrative user, start the client by executing the SSclient script.

```
.../apps/bin/SSclient
```

The client should come up initially with an “empty” screen.



At this point you can continue the SeisSpace® configuration process by following the steps in the ProMAX® and SeisSpace® System Administration documentation which are available from the menu pulldown **Help>Contents and Index** in the SeisSpace® navigator. When the Help appears, select **SeisSpace® System Administration>Configuring SeisSpace** in the help system navigation pane.

## Launching SeisSpace® from the OpenWorks™ Launcher

You can launch SeisSpace® from the Open Works launcher by following these steps:

1. Check your launcher.dat file in your user home directory. Under Applications, it should look like the following:

```
"SeisSpace/ProMAX 2D"          "/apps/bin/SSclient -o 2D 2> $HOME/
run/SeisSpace.err 1>&2 &"

"SeisSpace/ProMAX 3D"          "/apps/bin/SSclient -o 3D 2> $HOME/
run/SeisSpace.err 1>&2 &"
```

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```
"SeisSpace/ProMAX 4D"           "/apps/bin/SSclient -o 4D 2> $HOME/
run/SeisSpace.err 1>&2 &"

"SeisSpace/ProMAX DepthCharge"  "/apps/bin/SSclient -o DC 2>
$HOME/run/SeisSpace.err 1>&2 &"

"SeisSpace/ProMAX VSP"         "/apps/bin/SSclient -o VSP 2>
$HOME/run/SeisSpace.err 1>&2 &"
```

SSclient accesses the ../port/bin/seisclient script. However, you can enter the path to a personal script. Make sure that the script points to the correct library paths.

## 2. Start **OpenWorks™** and **Select Applications ->SeisSpace/ProMAX....** .

## Enhancements and New Functionality

### ***ProMAX®, SeisSpace®, ProMAX® DepthCharge 5000.0.1.2 Patch***

There is no new functionality in this patch, it only contains defect fixes.

### ***New SeisSpace® Processes in 5000.0.1.0***

The following list of SeisSpace® processes are new in R5000.0.1.0

- Orig JS Synth Trace Generation | dev- demote the original to dev status
- JavaSeis Synthetic Trace Generation - a new version
- Header Display
- Random Header Value Generator | dev
- renamed Acquisition Footprint Removal (Truncated SVD) to Acquisition Footprint Removal (still dev status)
- CVS Analysis and CVS Table Merge
- Interactive Crossplot Display\* | dev
- Inline Merge Sort

### ***New ProMAX® Processes in 5000.0.1.0***

The following list of ProMAX® processes are new in R5000.0.1.0

- Define 3D Project LIN Database\*
- 3D Arbitrary Line Select
- 3D Area Selection
- 3D Pass Fan Filter
- 3D Reject Fan Filter
- TFD Noise Rejection
- Trace Selection
- Static Binning\*
- Median Frequency Filter

### ***SeisSpace® Processes Promoted to Production status in 5000.0.1.0***

The following list of SeisSpace® processes were promoted from Development status to Production status between R5000.0.0.0 and R5000.0.1.0

- JavaSeis Synthetic Trace Generation

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- Trace Display

## ***SeisSpace® Processes Demoted to Devevelopment from Production status in 5000.0.1.0***

The following list of SeisSpace® processes were demoted from Production to Devevelopment status between R5000.0.0.0 and R5000.0.1.0

- Offset Regularizer
- Automatic Gain Control
- JavaSeis Parallel Sort - removed

## ***R5000.0.0.0 Development Status Processes***

There are a lot of processes in the SeisSpace® processes list that are in “development status” These processes can fall into a couple of different categories in this status for different reasons. Some processes will probably be adequate for general use, others are much less refined. For this release there are a couple of development status processes that are worth exercising and are on the “short list” that we intend to promote to production status in the near term.

### ***Recommended - Plan to promote to production soon.***

These tools are probably OK for you to use but we either know of a couple defects or they have not been exposed to enough use cases to consider them production processes. These include:

- Cable.Gun Header Assignment
- 2D Cable Geometry
- Acquisition Footprint Removal (Truncated SVD)
- Distributed Array Viewer
- 3D Poststack Kirchhoff Time Migration
- JavaSeis Velocity Table Workflows
- Interactive Crossplot Display

### ***Recommended - OK for general use***

These tools are probably OK for you to use. They are in Dev status either because we know of some significant defects or we know that the program is not as complete as we want it to be for full production use. These include:

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- Synthetic Trace Generation
- Header Print
- Header Ascii
- Distributed Array Print
- Testing Assertions
- JavaSeis Framework Print
- Data Context Print
- Ground Roll Removal

### ***Not Recommended - but you are free to try them out***

- Cross Spread Synthetic Generation
- SEG-Y Input
- SEG-Y Output
- ProMAX® Data Output
- Trace Math
- Trace-Trace Math
- Random header value generator
- 3D FFT
- Trace Muting
- Add Noise
- Trace Kill/Reverse
- All of the Amplitude/AVO development status processes
- All of the Deconvolution development status processes
- All of the Filtering/Transforms development status processes
- All of the Velocity development status processes
- All of the Stacking/Frame/Ensembles development status processes
- Trace Display Label
- Crossplot Display
- All of the Flow Control development status processes
- CPS TRIN (TRace INput from disk)
- CPS TROT (TRace OuTput to disk)

### ***Not Recommended - Do not use***

- Debug O-Direct
- Workpile dispatcher
- Distributed Array Reshape Tests
- Header Display

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## ***Hidden***

There are some additional development status processes that are in comment blocks in the etc/flowbuilder/PROWESS.xml file. There will be no support for these processes at all and we would prefer that they not be used unless you are specifically instructed to do so.

## ***Major Infrastructure Changes R5000.0.1.0***

### **SeisSpace® R5000.0.1.0 software version**

The upgrades include:

- Pure SeisSpace® and Hybrid flows will now check out ProMAX®, DepthCharge and LDI exec license features as required

### **ProMAX® R5000.0.1.0 software version**

The upgrades include:

- For licensing, tool names are checked differently and tool names must be less than 16 characters.

### **ProMAX® DepthCharge R5000.0.1.0 software version**

The upgrades include:

- NONE

## ***Major Infrastructure Changes R5000.0.0***

### **SeisSpace® R5000.0.0 software version**

The upgrades include:

- There is no longer a requirement to run a centralized sitemanager, but we feel that most installations will continue to use the system in this manner.

There is an option to use a sitemanager that is embedded in the Navigator for single user use. This mimics the behavior of the original ProMAX® system where you would load

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the application, configure it for your environment, launch the flow builder and start working.

You can still run a root owned centralized sitemanager for the multi-user case. The centralized sitemanager has been made more robust and fault tolerant (i.e. Navigators will reconnect if the sitemanager dies or is restarted).

- We have gone back to using PDF files for help. You can configure the help script to use any PDF file viewer including applications such as acroread, xpdf, or kpdf to display them.
- Support for Multi-Subflow flows.

You can now build multi-subflow hybrid or pure SeisSpace® module flows.

- Support for 5D JavaSeis frameworks.
- Change in the meta data files for a JavaSeis dataset in primary storage.

The meta data storage for primary only and secondary only JavaSeis datasets has been synchronized to have the same basic files associated with the two different types of datasets. In 2003.19..x the two datasets had different meta-data files with different information in them with made it impossible to restore a dataset that originated in primary only to a secondary only environment. Today original format JavaSeis datasets in primary are still OK but if they are archived, they must be returned to primary storage (which will happen automatically).

- Enhanced Processing history for ProMAX® and JavaSeis datasets.

Processing history propagation between JavaSeis and ProMAX® datasets has been improved so that the history is no longer lost as you change back and forth between using ProMAX® DDO and SS JDO to write the datasets

When a ProMAX® dataset is written from a hybrid flow, the history is now stored in the history.xml file and not in the IND file. (For conventional pure ProMAX® flows, the history is in the CIND file as before.) History is not propagated if you write a ProMAX® dataset in a hybrid flow and then do a pure ProMAX® DDI - process - DDO. The History propagation via ProMAX® DDI is only enabled if the history is in the CIND file of the input dataset.

- Arbitrary input select lists in JavaSeis Input Tools

The ability to use more complex lists for Hypercube, Volume and Frames has been improved in the JavaSeis Input Tools

- Better management of User Defined Headers



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User defined headers are now stored in a file at the Line level. These headers will be selectable from the standard header selector and are annotated as user headers vs. standard system headers.

You also have the ability to interrogate the headers and data context anywhere in a flow using two of the icons on the icon bar.

- Integrated Archive/Restore including handling sparse JavaSeis datasets.
- General Improvements in the Intelligent Parameterization in the flow builder.

Interactive Context and Header information in the flow editor

- 3D Visualization.

Introduction of integrated 3D visualization for poststack and prestack QC and analysis

- PreStack data publication to OpenWorks™ to support Fusion workflows
- Updated input output capabilities for OpenWorks™ seismic and horizon files
- 3D Geophysical tools - 3D FKK - 3D FXY decon - 3D Radon - 3D Mix - 3D AGC
- SNAP workflow (Signal to Noise Adaptive Processing) - a workflow that combined the use of conventional tools or 3D tools to remove selected noise and then use that data as a model for selected amplitude replacement on the input data.
- 2D Geophysical tools - SRME workflow
- Parallel Sort

An inline parallel sort tool is now available that utilizes the JavaSeis parallel distributed memory model combined with multiple read iterations is available to help with sorting problems on very large data volumes. This sort will allow you to output the data in a new 3D or 4D JavaSeis Framework. (5D sorts are not available)

- Ability to use the JavaSeis framework to store large velocity tables.

For some cases you may choose to store VEL, VID or VID tables as JavaSeis framework files. This is targeted for cases where you have gridded velocity information that is very dense. (Values at every CDP is required)

- Frame Utilities

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A series of utility functions for things you might need to do to manipulate individual frames (or ensembles) such as resetting SEQNO or sorting the traces within the frame or only passing a subset of the traces in the frame down the flow.

- Removed dependency on the embedded ksh. no longer distribute ksh and now us bash shell for all of the scripts
- Ability to handle large integer header values in the ProMAX® Graphical Socket tools

### **ProMAX® R5000.0.0 software version**

The upgrades include:

- Licensing Changes

product consolidation (ProMAX® MVA and ProMAX® DepthCharge) There is no longer a PROMAXMVA or PROMAXMVAUI feature in the license files, MVA is run under the ProMAX® DepthCharge license.

You will notice that your R5000 license files will no longer have unlimited exec features. There will now be a matching count of exec and UI instances. This is managed by the FlexLM Dup Grp U configuration that will allow a user to continue to access multiple exec instances.

- Automatic randomization of the secondary storage list on a “per DDO” basis.
- Updates to DBTools to be able to work with other user defined OPF database tables such as those created for working with Cross-Spread gathers.

### **ProMAX® DepthCharge R5000.0.0 software version**

The upgrades include:

- Combined delivery with the main software installation
- Rebuilt for R5000.0.0 OS and Java versions.
- Support for migration from topography for land data.

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## Fixed Issues

### ***ProMAX®, SeisSpace®, ProMAX® DepthCharge 5000.0.1.2 Patch***

The following defects were addressed in this patch.

818061 - Sitemanager and pure ProMAX flow job count

818709 - DDinsert failures when there are multiple DDinsterts in the flow

818708 - using the Extract Database Files module after a JavaSeis Data Input

819104 - Merge Database Files now handles more than 3 input databases.

822873 - Remove ProMAX 3D Viewer from processes list

818367 - First break picked edited in ProMAX Trace Display were not getting saved.

Related to 818061 this patch includes new SeisSpace/port/bin/sitemanager and etc/sitemgr scripts that understand the environment variable SM\_OPEN\_FILES which can be set in your sitemanager start script to increase the ulimit for the number of open files for a root owned centralized sitemanager. This will allow the sitemanager to accomodate a larger number of concurrent pure ProMAX jobs than the original release.

### ***ProMAX® R5000.0.1.0 software version***

812229 C superExec hangs running on newer, faster AMD chips preventing job execution  
5000.0.0.0 Admin

812963 ProMAX® 2D UI releasing ProMAX® 3D UI license 15000.0.0.0 Admin Licenses

798420 Unable to read ProMAX® dataset - CMAP is corrupted. 2003.19.1.0 Admin Disk Management

790778 REMHOME not being interpreted correctly, or something. 5000.0.0.0 Admin Tape Device

807875 3D Velocity Viewer/Editor\* will not run with a Field ProMAX® license.  
5000.0.0.0 Admin Licenses

804752 SC Decomposition: Problems when receivers are zero fold. 5000.0.0.0 Amplitude/  
AVO Surface Consistent Amps

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800649 Problem: 2003.19.1.1 and R5000 not producing the correct results. 2003.19.1.1  
Amplitude / AVO Surface Consistent Amps

807853 Memory errors when memory available is larger than what exec.log says program  
needs. Happens when CDP database is much bigger than the actual data. 5000.0.0.0  
Amplitude / AVO Surface Consistent Amps

806445 Cannot use Parameter Test with Offset Amp Recovery. Menu only allows max 99.0 for  
db/sec gain prohibiting "99999" needed for Parameter Test substitution. 5000.0.0.0  
Amplitude / AVO Offset Amplitude Recovery

796542 Program should warn if duplicate TRC#/HDR# files are found in same dataset  
2003.19.1.1 Data Input / Output Dataset Merge

809251 SSO generating very large .cmp files compared with PostStack PAL 2003.19.1.1  
Data Input / Output SeisWorks Seismic Output

800352 Doc Bug: Need to alter rpm's suggested in SeisSpace® Release notes. 5000.0.0.0  
Data Input / Output

800895 Dataset merge - output file not readable due to empty datasets. 2003.19.1.1 Data  
Input / Output Dataset Merge

796586 Have flag from Screen Display in Trace Display 2003.19.1.1 Display Trace Display

797817 Problem: long dataset/flow lists and mouse pointer position tracking errors  
2003.19.1.1 Display User Interface

802804 some ensembles duplicated and passed down the flow 5000.0.0.0 Editing / Muting /  
Noise Spike to Median Ratio Editor

808855 "merge2d.menu", which worked in the ProMAX® system, fatally errors in  
SeisSpace® 5000.0.0.0 Geometry / Headers

798086 Protab: Unable to import ASCII file that I can successfully import in 2003.19.1.1  
5000.0.0.0 Geometry / Headers Parameter Table Editor

804418 Inline Geom Header Load does not convert double precision headers correctly  
5000.0.0.0 Geometry / Headers Inline Geom Header Load

799435 update SPS read to handle Upholes and Depths 5000.0.0.0 Geometry / Headers 3D  
Land Geometry Spreadsheet\*

795287 trouble importing 3D horizon table 2003.19.1.1 Geometry / Headers Parameter  
Table Editor

742988 Kirchhoff Depth Mig: zero amps output for 2 of the 3 options if min velocity

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parameter is set to 1500 or higher 2003.12.1.1 Migration / DMO Kirchhoff Depth Mig.

811438 Port 'Receiver Spread Checking' to R5000 2003.12.1.1 Old / Obsolete Receiver Spread Checking\*

798722 Depth to Time conversion is not setting TLIVE\_E and TFULL\_E correctly  
5000.0.0.0 Ray Tracing / Tomography / Depth Conversion Time/Depth Conversion

731785 Do not tolerate 0.0 in the input velocity field 2003.12.1.1 Ray Tracing /  
Tomography / Depth Conversion Time/Depth Conversion

761200 time to depth conversion will "run" using an empty table - output traces will be 0  
length and can lock the machine if used in later flows. 2003.19.1.0 Ray Tracing /  
Tomography / Depth Conversion Time/Depth Conversion

806669 aman not finding ProMAX® routines 5000.0.0.0 SDK Documentation

790939 DOCUMENTATION: Convert DevKit Frame .doc files to .pdf 5000.0.0.0 SDK  
Documentation

799207 Problem: cannot sort SEG-Y Input by FFID -- no aux traces 5000.0.0.0 SEG / 3rd  
Party I/O SEG-Y Input

793982 Upgrade SEG-Y Input to set GEO\_COMP header for Rev 1 5000.0.0.0 SEG / 3rd  
Party I/O SEG-Y Input

796060 Problem: Large CDP numbers getting duplicated by rounding 5000.0.0.0 Stacking  
/ Ensembles Ensemble Stack/Combine

806730 User wants a similar program that runs in 24bit and will work on 3D datasets  
5000.0.0.0 Velocity Constant Velocity Stacks

796522 NMO forward/inverse produces very low frequency data up in the stretched zone  
2003.19.1.1 Velocity Normal Moveout Correction

## ***ProMAX® R5000.0.0 software version***

777747 DEFC fixes for dsclean utility 2003.19.1.1 Admin Miscellaneous

631991 DEFC SDK docs on making exec tools out of date. 2003.12.1.0 SDK  
Documentation

300339 ENHC UPGRADE: to specify the seismic files to output with Archive 6.2\_R97 Data  
Input / Output Archive to Tape

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501752 ENHC UPGRADE: Add a read-only secondary partition stanza option. 5.1 Admin Config\_File

631000 DEFC Table-header transfer - won't accept IHT horizons where 2nd key is null  
2003.12.1.0 Geometry / Headers Table to Header Transfer

629478 DEFC Angle Limited CDP Gathers does not mute the same angle the same value top vs bottom 2003.12.1.0 Amplitude / AVO AVO Analysis Gathers

705241 DEFC IGHL by valid TRACE\_NO fails for marine 3D 2003.19.1.0 Geometry / Headers Inline Geom Header Load

698331 DEFC Hand Statics interpolation option not working in ProMAX® 2003.12.1  
2003.12.1.0 Statics Hand Statics

749229 DEFC Linux64 bit: Prestack Curved Ray Kirchhoff 2D Time Mig fails with SIGSEGV (segmentation fault)" when input ETA parameter table has been created with HARLAN formula. 2003.19.1.0 Migration / DMO Prestack Curved Ray Kirchhoff 2D Time Mig.

767255 DEFC If secondary key is NONE, output header values are all RNULL 2003.19.1.0  
Geometry / Headers Table to Header Transfer

619496 ENHC Processes list and Processes.local for "customer added" modules 2003.3.3.2  
Admin Miscellaneous

755347 DEFC Interactive Spectral analysis not honoring display ranges. 2003.12.1.1  
Display Interactive Spectral Analysis

753446 DEFC Documentation: Error on page 2 of Help file 2003.12.1.1 Amplitude / AVO  
Array Effect Filtering

625598 DEFC Docs:Total Tape Solution user Guide link does not work properly.  
2003.12.1.0 Miscellaneous

628263 ENHC change the module list in the UI to allow different colors for different modules.  
2003.12.1.0 Display User Interface

620108 DEFC AVO attribute 2 (gradient) using aoffset is much different than using ang\_valu  
2003.3.3.2 Amplitude / AVO AVO Attribute Stacks

624856 ENHC Upgrade: Update the version of flexlm to v7.2g for SGI and Solaris  
2003.3.0.0 Admin Licenses

744336 DEFC when user click "save table to disk" then Velocity Viewer Point Editor crashes.  
2003.12.2.0 Velocity Velocity Viewer/Point Editor\*

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724948 DEFC menu error - MAXTR is not set properly for embedded ENS\_COMBINE  
2003.12.1.1 Migration / DMO Explicit FD 3D Time Mig.

719587 DEFC DOCUMENTATION: Help file for Radon Filter module needs updating  
2003.12.1.0 Data Enhancement Radon Filter

720420 ENHC UPGRADE: Ability to do FXY on x-spread gathers 2003.12.1.0 Data  
Enhancement

732291 DEFC 408XL&sercel 388 data- R\_LINE and SRF\_SLOC headers are one trace off.  
2003.12.1.1 SEG / 3rd Party I/O SEG-D Input

743551 DEFC Documentation; The link for 3D Supergather Select is not working properly.  
2003.12.1.0 Velocity Velocity Analysis

725762 DEFC ?: Why is \$PROMAX\_HOME and \$REMHOME both reported for proclient?  
2003.12.1.1 Admin Tape Device

727863 DEFC Dataset Merge --> Copy looks like default behavior to write first HDR/TRC  
to primary and then span to secondary disks. User would like to request upgrade to skip primary  
and write only to secondary similar to what's available in Disk Data Output. 2003.12.1.1  
Data Input / Output Dataset Merge

744532 DEFC Linux64bit Velocity Analysis: Bow-and-Arrow-PD icon is not working on  
Linux64bit system. 2003.12.2.0 Velocity Velocity Analysis

705979 DEFC override/repair job status from UI notification window 2003.3.3.2 Display  
User Interface

705536 ENHC DOCUMENTATION: unfinished Help file 2003.12.1.0 Data Enhancement  
3D Vel-Az-Freq Filter

705671 DEFC Documentation: What is required to merge datasets? 2003.12.1.0 Data Input  
/ Output Dataset Merge

718535 ENHC Swell Noise Attenuation Module in ProMAX® 2003.12.2.0 Data  
Enhancement

718541 DEFC Documentation WRONG. It says remove ENSB\_SCL by multiplying with  
Trace Weighting. 2003.12.1.0 Amplitude / AVO Ensemble Balance

714198 ENHC UPGRADE: Ability to query status of jobs running remotely. 2003.12.1.1  
Display User Interface

782792 DEFC TLIVE\_S = 0 cause trace to be killed 2003.19.1.1 Editing / Muting / Noise  
Spike & Noise Burst Edit

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782647 DEFC equation error in overview doc? 2003.19.1.1 Data Enhancement 3D CRSZO Search

786430 DEFC Problem: user menu getting corrupted by saving and opening flow.  
2003.19.1.1 SDK Menus/Processes/Dot ProMAX

783354 DEFC problems with Segment 31 & 62 of I/O System Two 8058 format SEG-D  
2003.19.1.1 SEG / 3rd Party I/O SEG-D Input

780039 DEFC update menu to default the ref\_stat\_math file from \$PROMAX\_HOME instead  
of /advance 2003.19.1.0 Refraction / Residual Statics Apply Refraction Statics

759305 DEFC DOCUMENTATION: The REV-1 documentation is in the wrong location,  
after the remap information 2003.19.1.0 SEG / 3rd Party I/O SEG-Y Input

781599 DEFC I/O SEG-D field tapes 2003.19.1.1 SEG / 3rd Party I/O SEG-D Input

763410 DEFC Cursor shows values 0.0 for amplitude, frequency and wavenumber in F-K  
Analysis 2003.19.1.0 Display F-K Analysis

761680 DEFC cannot input an offset > 10000 ft in 3D CRS Stack menu 2003.19.1.0 Data  
Enhancement 3D CRS Stack

762213 DEFC DOCUMENTATION: Where does header TAPE\_T0 come from?  
2003.12.1.0 SEG / 3rd Party I/O SEG-Y Input

787708 DEFC IGHL for 3D Marine data spews warnings and does not create WB\_TIME  
correctly 2003.19.1.1 Geometry / Headers Inline Geom Header Load

767126 DEFC Input wavelet taper is wrong if menu TZERO is not equal to TZERO in input  
trace headers 2003.19.1.0 Wavelet Processing / Inversion Filter Generation

788277 DEFC SEG-D fails to read all channels in 2003.19.1.1. Reads correctly in  
2003.12.1.0 2003.19.1.1 SEG / 3rd Party I/O SEG-D Input

773582 ENHC can the modules in the Instrument Test Suite that are obsolete be listed as  
obsolete 2003.12.1.0 Instrument Tests Vibroseis Test

773413 DEFC column named NULL must be filled with 1.0 for all 2D IHD and IHT tables  
2003.19.1.1 Miscellaneous Database/Horizon Transfer\*

775835 DEFC BUG in Trace Display annotation for BIG CDPS (ie., >16.8 million). NOTE:  
The Trace Display top annotation by CDP is incorrect but the MAX Icon information window  
and bottom CDP info tracker is correct. 2003.19.1.1 Display Trace Display

757927 DEFC aborts in version 2003.19.1.0 - With any color options - 2003.19.1.0 Display  
Create CGM+ Plotfile



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772514 DEFC Failure to properly merge 2 files- Need to update DDIns documentation.  
2003.12.1.1 Data Input / Output Disk Data Insert

778802 DEFC Deleting datasets on a different location problem 2003.12.1.1 Admin Disk  
Management

758703 DEFC ProTab can only view/edit 2 layes of a multi-layered GAT parameter table.  
2003.19.1.0 Geometry / Headers Parameter Table Editor

790196 DEFC Problem: Q-comp putting Gibbs into frequency spectrum 2003.12.1.1  
Amplitude / AVO

704033 ENHC Have PromaxTOD file create as a process in Promax rather than executing it  
as a script? 2003.12.1.0 Data Input / Output Landmark SEG-Y Input

740551 DEFC Problem viewing history on certain SeisSpace® datasets 2003.12.1.1  
Display History Viewer

767621 ENHC Upgrade: PBS server/queue combination is too long for a pop-up. Please  
separate pbs server and queue name selections. 2003.19.1.1 Admin Queues: PBS

515425 DEFC using primary storage = YES still wants to put data in secondary storage  
2003.0.0.0 Data Input / Output List/Restore from Tape

515505 DEFC Cannot archive more than 2 GBytes to disk 2003.0.0.0 Data Input / Output  
Archive to Tape

515428 DEFC Cannot overwrite an existing table with a larger file 1998.6 Geometry /  
Headers Parameter Table Editor

782388 DEFC ProMAX® UI will crash if the user sorts the Areas alphabetically.  
2003.19.1.1 Display User Interface

759677 DEFC PROTAB: Problem importing velocities into SeisSpace®/ProMAX®  
2003.19.1.0 Velocity Table/Column

761119 DEFC Reset of mute headers after partial NMO still broken in 2003.12.1.1  
2003.12.1.1 Velocity Normal Moveout Correction

758270 DEFC SEG-Y Input module broken with MS-DOS. 2003.19.1.0 SEG / 3rd Party I/  
O SEG-Y Input

754122 DEFC 64 bit LINUX ONLY: Polygon delimit in DBTools causes DBTools to fail.  
2003.19.1.1 Geometry / Headers DBTools

761666 DEFC UKOOA Navigation import missing minus sign from source X coordinate  
2003.19.1.0 Geometry / Headers 3D Marine Geometry Spreadsheet\*

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781142 ENHC Enhancement for Trace Header Math to be able to convert a mixed character/number header to be an integer. 2003.19.1.1 Geometry / Headers

777708 DEFC DBTools 2D Matrix does not show coordinates 2003.19.1.1 Geometry / Headers DBTools

786717 DEFC Track Resample for Crooked Line Layout is not working for some surveys in ProMAX® 2003.19.1.1. Exact cause is under investigation at this time. 2003.19.1.1 Crooked Line Layout Track Resample

769446 ENHC Stderr file filling all disk space. 2003.19.1.1 Admin Disk Management

518323 DEFC Linux and SGI --- the attribute copy option is a quick exit 2003.3.2.0 Geometry / Headers DBTools

790438 DEFC Screen Display not allowing user to make picks, CVS modules behaving the same. 2003.19.1.1 Old / Obsolete Stack Display

792701 DEFC Failure to read beyond 99 channel sets in SEG-D 2003.12.1.1 SEG / 3rd Party I/O SEG-D Input

788245 DEFC table output by Autopicker needs to resolve X-Y before writing table; otherwise, cannot see autopicked functions picks in VA 2003.19.1.1 Velocity Velocity Auto Picker

788842 DEFC the Well Log Input menu is not working properly in ProMAX®/SeisSpace®. If you try to read LAS you are stuck with the tape parameters. 2003.19.1.1 Data Input / Output Well Log Input

705943 DEFC vary secondary storage for multiple concurrent job submissions 2003.12.1.0 Admin Config\_File

631669 DEFC Dead traces moved to end of ensemble 2003.12.1.0 Data Enhancement Radon Filter

739964 DEFC RMO outputs dead traces if NA\_STAT is not 0.0 2003.12.1.1 Velocity Residual Moveout Correction

767956 DEFC ESCALATED FROM APO:2D crs stack menu problem 2003.19.1.0 Data Enhancement 3D CRS Stack

778852 ENHC 2D CRS Stack entering a maximum offset larger than 10,000 3. Medium 2003.19.1.0 Data Enhancement 3D CRS Stack

616429 ENHC Disable Exec checking for ProMAX® service 3. Medium 2003.3.2.0 Admin Queues: PBS

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760581 DEFC 64bit only: MB3 on Summary Statistics blows away DBTools. 3. Medium  
2003.19.1.0 Geometry / Headers DBTools

618290 DEFC ProMAX® Velocity Viewer dies 3. Medium 2003.3.3.1 Velocity Velocity  
Viewer/Point Editor\*

722379 ENHC Documentation: ProMAX® - KLT Noise Canceller - produces noise  
2003.12.1.1 Data Enhancement KLT Noise Canceller

752518 DEFC ProMax SEG-D read problem - very long records 2003.12.1.1 SEG / 3rd  
Party I/O SEG-D Input

789724 DEFC Product ProManager Is there a way to build a filename greater than 32  
character 2003.12.1.1 ProMANAGER Flow Replication

307021 DEFC cpu goes up to 99% after I exit the processing history window 2003.3.3.1  
Display History Viewer

500613 ENHC Upgrade request: more flexibility in System/User config files 5.01 Admin  
Miscellaneous

305145 ENHC How can I find out the size of a project on disk? 2003.0.0.0 Display User  
Interface

306728 ENHC Doesn't like scientific notation of high number in DbTools + Trace Display  
2003.3.3.0 Geometry / Headers DBTools

509843 DEFC tables based on 8-digit SRF\_SLOC or REC\_SLOC killing multiple traces  
1998.1.1 Editing / Muting / Noise Trace Kill/Reverse

510435 ENHC UPGRADE/NEW FUNCTIONALITY: do we have 3D poststack  
interpolation software? 1998.1 Migration / DMO DMO to Gathers 3D

507527 ENHC UPGRADE: Add hooks in cgm\_screendump for ZEH 98+ plotfile script.  
1998.1 Display Screendump

160894 DEFC Creating huge SG\_CDP number when TYPE-IN ILN/XLN pairs and ILN/  
XLN grid does not start at 1/1 2003.3.2.0 Macros 3D Supergather Formation\*

136892 ENHC DOC UPGRADE: traces output all blank 2003.0.0.0 Stacking / Ensembles  
Stack 3D

156446 DEFC Makeadvance referring to utopdir but using atopdir 2003.3.2.0 SDK Make  
System

157905 ENHC User does not like the way we fill disks 2003.3.2.0 Data Input / Output Disk  
Data Output

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151711 DEFC Problem: reading 8-byte real (big endian) on a little endian machine a problem.  
2003.3.2.0 Display Trace Display

305058 ENHC overlay colors driven/influenced by Seisworks 2003.0.0.0 Velocity Volume Viewer/Editor\*

169165 DEFC comes up in black and white - will not start with default color map  
2003.3.3.0 Velocity Velocity Analysis

521813 DEFC if NMO is in one split of a 2 split flow - the nmo applied header gets set to 1 in  
2003.12.1.0 Flow Control SPLIT

619106 DEFC Menu name change breaks tutorial 2003.12.1.0 Geometry / Headers 3D Poststack Geometry

520491 ENHC Header List must be resized every time 2003.3.3.0 Display Trace Display

521545 ENHC upgrade to allow multiple execs to write to the same output data set  
2003.12.1.0 Data Input / Output Disk Data Output

147104 DEFC Drops dead marine traces, but processes dead land traces 2003.0.0.0 Geometry / Headers Inline Geom Header Load

141209 DEFC Poor results using multiple gates and start time > 0 2003.0.0.0 Data Enhancement Radon Filter

128736 DEFC blows away when switching lines 1998.6 Geometry / Headers DBTools

513267 DEFC port/help/html directory missing on release CD 1998.6 SDK Installation

513533 ENHC UPGRADE: Add E-Mail Notification 1998.6 ProMANAGER Flow Replication

513044 DEFC problems with Effective Filter length 1998.1.1 Wavelet Processing / Inversion Derive Average Wavelet

515840 DEFC marine 3D - inline geom hdr load fails trying to get FOLD from SRF  
2003.3.0.0 Geometry / Headers Inline Geom Header Load

518325 DEFC att with null values causes failure in 2d and 3d matrix plots 2003.3.2.0 Geometry / Headers DBTools

515355 DEFC "Merge Database Files" not working for 3D 2003.3.2.0 Geometry / Headers Merge Database Files\*

767032 DEFC OPEN Output filtered wavelet is wrong when filter is designed in frequency domain and there is no taper 2003.19.1.0 Wavelet Processing / Inversion Filter Generation

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793359 DEFC OPEN Differences between Kirchhoff PSTM and Kirchhoff Curved Ray (3D)  
2003.19.1.1 Migration / DMO Prestack Curve Ray Kirchhoff 3D Time Mig.

792346 DEFC OPEN Phase-Amplitude Q Compensation fails when Max. gain of any  
frequency (dBpower) = 10000.0 2003.19.1.0 Filtering / Transforms Phase-Amplitude Q  
Compensation

785675 DEFC OPEN Disk Data Insert tertiary sort handling -- tertiary level traces are not  
sorted 2003.19.1.1 Data Input / Output Disk Data Insert

760985 DEFC OPEN Problem: skipping primary for trace data forces skip for OPF as well.  
2003.19.1.0 Data Input / Output List/Restore from Tape

761893 ENHC OPEN Product ProMAX®: Double precision menu items Need way of  
addressing and checking "double precision" input in menus now that double precision headers  
are supported. 2003.19.1.0 SDK Menus/Processes/Dot ProMAX®

163841 ENHC OPEN wants a wavelet transform per paper below 2003.0.0.0 Filtering /  
Transforms Trace Math Transforms

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796775 KMIG Polygon write parameter help needs help 5000.0.0.0

805568 Release notes makes claims regarding sitemanager restarts that are false when running sitemanager and Navigator from same machine. 5000.0.0.0 Admin

799762 Problem archiving to multiple tapes 5000.0.0.0 Admin

800705 Upgrade to allow client to hardwire JDO "Dataset trace format" similar to what we currently do for "secondary storage" 5000.0.0.0 Admin

793710 Error: SEG\_READ dialog - lisp error popup 5000.0.0.0 Administration

803561 SeisSpace® - 3D AGC not running 5000.0.0.0 Amplitude/AVO 3D Automatic Gain Control

813652 JavaSeis Sortmap Create reports a negative number of framework traces  
5000.0.0.0 Data Input/Output JavaSeis Data Input

790431 getting duplicate extents occasionally in sys test flow -- restart flow - may be a clue  
5000.0.0.0 Data Input/Output JavaSeis Data Output

782878 header values set to 0 from multi-node creation run cause generation of huge sortmap  
5000.0.0.0 Data Input/Output JavaSeis Data Output

783511 Trace header only mode still reads trace data on a sorted dataset 5000.0.0.0 Data  
Input/Output JavaSeis Data Input

794528 rewrite of JS dataset after empty puts 1 extent to primary only 5000.0.0.0 Data Input/  
Output JavaSeis Data Output

782860 need decomposition and framework flexibility 5000.0.0.0 Data Input/Output  
JavaSeis Synthetic Trace Generation

795525 JAVASEIS DATA MATCH. previous input traces not cleared before next frame/  
ensemble input 5000.0.0.0 Data Input/Output JavaSeis Data Match

804263 Problem: Circular by Volume acting like Circular by Frame 5000.0.0.0 Data Input/  
Output JavaSeis Data Input

792735 Trace Display:WS 4.4: Primary Header labeling and dataset labeling not updating  
when 'JavaSeis Data Match' is contained in flow 5000.0.0.0 Data Input/Output JavaSeis  
Data Match

776591 Scanned Javaseis Framework Creation menu does not refresh the dataset properties  
after re-execution with different framework 2003.19.1.1 Datasets

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- 515765 display/edit ProMAX® tables in Trace Display 5000.0.0.0 Display Trace Display
- 811094 3D Viewer. Initial slice or probe shows up. When second probe added first one is hidden. 5000.0.0.0 Display 3D Viewer
- 794299 There is no probe label in the controls section to let you know which probe is selected. The dimension sliders are showing as selected, but nothing that shows the probe name and number. 5000.0.0.0 Display 3D Viewer
- 794723 get very different gains depending on if caching is on or off 5000.0.0.0 Display 3D Viewer
- 792046 Probe label in the bottom control section does not update when probes turned on and off via the inventory list, or selected using MB1. 5000.0.0.0 Display 3D Viewer
- 791384 Selected Probe and slider bars on the bottom not working with multiple probes. 5000.0.0.0 Display 3D Viewer
- 791374 MB3 Change <Frame> Dataset not working for me. 5000.0.0.0 Display 3D Viewer
- 791398 Problems with Toggle Datasets when multiple probes displayed. 5000.0.0.0 Display 3D Viewer
- 791422 Problems choosing and animating probe by picking the name near the appropriate slider. 5000.0.0.0 Display 3D Viewer
- 793891 3D viewer - Cert 1 - hotkey 5 not working to show difference datasets. 5000.0.0.0 Display 3D Viewer
- 811462 Case 1524517 - Client's Acquisition Footprint Removal data shows "cross-hatching" if run in both ILN/XLN directions. 5000.0.0.0 Distributed Array Utilities
- 806111 SNAP menu bug using templates and replicas - rules resetting parameter values to original instead of keeping changes 5000.0.0.0 Editing/Muting/Noise Signal/Noise Adaptive Processing (SNAP)
- 806934 flow rename or copy still retains name of the original flow 5000.0.0.0 Editing/Muting/Noise Signal/Noise Adaptive Processing (SNAP)
- 806061 replica "traces in" option only reporting # DDI traces passed thru. Does not include any DDIns traces. 5000.0.0.0 Flow Replication
- 804967 Flow replication dropping .0 from float values entered in Replica Parameters Table. 5000.0.0.0 Flow Replication
- 791987 aperture in KDMIG (KTMIG) is incorrect in crossline direction. 2003.19.1.1 Migration KDMIG (Kirchhoff Depth MIGration)

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788747 KT-KDMIG Polygon: need an option to allow you to save an edited or newly entered polygon. 5000.0.0.0 Migration KTMIG (Kirchhoff Time MIGration)

784640 Aperture definition in 2D KTMIG is not being honored by the program. (Half) aperture is about 75% of requested distance. 2003.19.1.1 Migration KTMIG (Kirchhoff Time MIGration)

791988 aperture in KTMIG (KDMIG) is incorrect in crossline direction. 2003.19.1.1 Migration KTMIG (Kirchhoff Time MIGration)

802967 How to make "Explicit FD 3D time Mig (SMP) work? 5000.0.0.0 Migration

794282 Always uses default values for RAY\_ANG1 parameters 2003.19.1.1 Migration KDMIG (Kirchhoff Depth MIGration)

802967 How to make "Explicit FD 3D time Mig (SMP) work? 5000.0.0.0 Migration

783130 KD/TMIG menu erratic behavior requires ever larger resizing 5000.0.0.0 Migration KDMIG (Kirchhoff Depth MIGration)

793042 For 2D data...NULL XY coords in CDP database causing miscalculation of "Transform grid angle" in KTMIG. 2003.19.1.1 Migration KTMIG (Kirchhoff Time MIGration)

795136 KMIG: handedness option 5000.0.0.0 Migration KTMIG (Kirchhoff Time MIGration)

798563 Add an env variable to allow override of .secondary folder 5000.0.0.0 Navigator Data Home definition

798562 Make the JavaSeis Secondary Storage Properties Dialog wide enough to see the Remove button. 5000.0.0.0 Navigator Data Home definition

798625 useless messages back to Xterm when Job Viewer monitor is "on". 5000.0.0.0 Navigator Job Monitor

796198 Edit Tables in SeisSpace® 2003.19.1 using PROMAX\_ETC\_HOME config\_file rather than PROMAX\_ETC\_CONFIG\_FILE\_HOME. 12003.19.1.0 Navigator Tables Tab

805090 Add prowess.properties to add specification of where .user\_headers resides. 5000.0.0.0 Navigator Data Home definition

806671 Problem: The header length size for dataset properties is incorrect. 5000.0.0.0 Navigator Dataset Properties

807637 Unable to restore a 6 gigabyte database archived using the archive wizard. 5000.0.0.0 Navigator Restore Wizard



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807947 Erroneous warnings in ProMAX® menus, about allowable string parameter length  
5000.0.0.0 Navigator

797875 SeisSpace® does not show which product it is in. 5000.0.0.0 Navigator General

810523 Product SeisSpace®: backslash menu problem 5000.0.0.0 SDK Example Menus

798724 Job fails stating integer header is not an integer 5000.0.0.0 Trace/Header Utilities  
Cross Spread Geometry

797309 Problem: SeisSpace® Header Math padding in traces. 5000.0.0.0 Trace/Header  
Utilities Header Math

791731 Help file working change needed. Cross Spread Geometry-definition for  
XSD\_ANGL. 5000.0.0.0 Trace/Header Utilities Cross Spread Geometry

803015 CrossSpread Geometry goes into infinite loop. 5000.0.0.0 Trace/Header Utilities  
Cross Spread Geometry

799695 CrossSpread Geometry assigns <negative> numbers for non-unique XSD\_SLOC,  
XSD\_RLOC's. Data is dropped, otherwise job blows due to JavaSeis framework not knowing  
what to do with <negative> SLOCs, RLOC's. 5000.0.0.0 Trace/Header Utilities Cross  
Spread Geometry

792725 Missing mouse helps for Cross Spread Geometry parameters 5000.0.0.0 Trace/  
Header Utilities Cross Spread Geometry

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761097 ENHC UPGRADE: need a Time Slice Input tool for reading a JavaSeis stack dataset.  
2003.19.1.0 Datasets JavaSeis Data Input

772557 DEFC Units for parameter TABLE\_MEM\_TO\_USE are wrong 2003.19.1.1  
Migration KDMIG (Kirchhoff Depth MIGration)

769155 DEFC if you use eta and input a constant for VZ/VX the job will fail building the TT  
tables 2003.19.1.1 Migration KDMIG (Kirchhoff Depth MIGration)

773375 DEFC Can not get node-locked license to work under SeisSpace® 64-bit, Redhat 4.4  
server. 2003.19.1.1 Licensing Client

772560 DEFC Polygon option has 3 errors 2003.19.1.1 Migration KDMIG (Kirchhoff  
Depth MIGration)

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774046 DEFC SeisSpace® job viewer question: Need to add YEAR tracking in Job creation column. 2003.19.1.1 Job Viewer

769176 DEFC KTMIG "DISPLAY\_INFO" button blows away SeisSpace® User Interface 2003.19.1.1 Migration KTIMG (Kirchhoff Time MIGration)

785106 ENHC enhancement request - kill/continue from job viewer button/option 2003.19.1.1 Admin

771908 DEFC Job Viewer status shows unknown, stays running status 2003.19.1.1 Job Viewer

745756 DEFC SeisSpace® post installation script needs to be modified. 2003.19.1.0 Installation Post Installation

755350 DEFC If I change the flow name in chaining, the new name is not used. 2003.19.1.0 Flow Builder

735636 DEFC Unable to purge subdiectory exec.xxx files from multiple Replica runs 2003.12.1.1 Navigator

791145 DEFC SS - changing global read permissions also changes global write! 2003.19.1.1 Administrator

791503 ENHC Job Viewer column titled "% Processed" should say "% Input data read" 2003.19.1.1 Job Viewer General

781672 DEFC Problem with replica string substitution using 64-bit 2003.19.1.1 Flow Builder

782636 DEFC Product SeisSpace®: promax\_path menu function problem 2003.19.1.1 Exec

764069 ENHC SeisSpace®:Batch submit issues 2003.19.1.1 Job Submission

765539 ENHC want a hot-key to close and save the type-in window for menus (the emacs widget replacement) 2003.19.1.1 Flow Builder

764067 DEFC Sitemanager robustness 2003.19.1.0 Job Submission

515740 ENHC generate flow from dataset history 1.0 Flow Builder

769576 DEFC Product SeisSpace®: Submit menu help 2003.19.1.1 Administrator Documentation

782227 DEFC SeisSpace® CGM plotfiles gain values are not being applied 2003.19.1.1 Display Trace Display

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759668 ENHC Selecting to "Share this Project" produces same worded popup. 2003.19.1.0  
Flow Builder General

615485 DEFC User preference to auto-collapse disabled tools does not work on ProMAX®  
flows 2003.12.1.0

766204 DEFC Preference 'Use ProTAB to edit parameter tables' is broken under SeisSpace®  
2003.19.1.1 Tools

763452 ENHC Product SeisSpace®: Batch submit menu UPGRADE TO HONOR LABELS  
similar to what ProMAX® does... 2003.19.1.1 Job Submission

521753 DEFC SeisSpace®:Browse button is not working for any ProMAGIC module.  
2003.0.0.0 Flow Builder General

771057 DEFC Replica table values are presented improperly and substitution is incorrect for  
small decimal floats 2003.19.1.1 Flow Builder

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### **Depthcharge™ R5000.0.0 software version**

761426 DEFC User can specify memory heap usage 2003.19.1.0 Plane Wave Migration\*

765233 DEFC Stacking tool needs an option to overwrite existing data. 2003.19.1.1 Plane  
Wave Mig Utilities\*

## Known Issues

### **ProMAX®**

#### **R5000.0.1.0 General Issues:**

1. Header Delete should not be used. Changes were made to the infrastructure to add headers which has limited the use of Header Delete.

#### **R5000.0.0.0 General Issues:**

1. Due to 3rd party software distribution restrictions, we are no longer able to distribute NQS, Emacs, Gmake, or Acroread, with ProMAX®. We do still provide the q\* scripts.
2. Due to export restrictions on source code and libraries built from GPL source repositories we can no longer deliver any linux system libraries. It is up to the user to ensure all required system libraries are installed on the servers. Details are listed earlier in this Release Notes Document.
3. You may find that you will have to rebuild tape jobs. Sometimes overlaying the menus works, sometimes it doesn't.
4. You may find that you will have to rebuild CGM and UNISEC jobs. Sometimes overlaying the menus works, sometimes it doesn't.

### **SeisSpace®**

#### **R5000.0.1.0 General Issues:**

##### ***Dataset "Empty" function -***

**THE WORK ON DATASET EMPTY HAS BEEN COMPLETED and implemented in 5000.0.1.0 where Empty now creates a V2 format empty dataset. The re-creation is still required. Archive and Restore do handle both versions of "emptied" datasets You will not be able to rewrite to a dataset that has been emptied until you re-create it. Jobs will fail with an error message indicating this action is required.**

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## R5000.0.0.0 General Issues:

### General Limitation-

You will find many processing steps that will work well utilizing the JavaSeis IO but you will also find some segments of a conventional workflow where you will not be able to utilize the JavaSeis datasets. Testing has shown that you can drive conventional Velocity Analysis and Residual Statics workflows based on JavaSeis datasets, where ProMAX® datasets are used to complete these sequences.

There are several ProMAX® processes that are Macros that use ProMAX® Disk Data Input. These processes will require a ProMAX® dataset as input.

### *Dataset "Empty" function -*

There is a new function in the navigator called Empty a dataset. This will leave all of the components of a dataset intact but delete the TRC and HDR extents. This is available for both ProMAX® and JavaSeis datasets. **Note:** after you Empty a JavaSeis dataset you MUST re-create it before you write to it again. The problem that you may find is that if you write to a dataset that has been Emptied, you will end up with a single TRC and HDR extent in primary. The Empty operation previously left a dataset that looked like an empty V1 JavaSeis Primary storage only dataset.

### *JavaSeis Data Input -*

There is no capability to send overlapping data ranges to the different nodes.

### *JavaSeis Data Output-*

3D, 4D and 5D JavaSeis frameworks are supported.

### *Additional issues*

There are a few issues that we want to let you know that we already know about. We did not feel that any of these issues were severe enough to prevent us from releasing R5000.0.1.0, but you may encounter some of these as you work with the software. We are prioritizing how these issues will be addressed for a post release functional upgrade and future releases.

1. We are still finding some menus that do not behave perfectly in the SeisSpace® UI. You will see occasional error message windows. Please let us know which menus you

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find that behave poorly after you overlay new versions and re-open or execute the flow.

2. Due to export restrictions on source code and libraries built from GPL source repositories we can no longer deliver any linux system libraries. It is up to the user to ensure all required system libraries are installed on the servers. Details are listed earlier in this Release Notes Document on pages 8 and 9.
3. You may find that you will have to rebuild tape jobs. Sometimes overlaying the menus works, sometimes it doesn't.
4. You may find that you will have to rebuild CGM and UNISEC jobs. Sometimes overlaying the menus works, sometimes it doesn't.
5. Area and Line copies in the user interface are generally OK, but you cannot copy Area and Lines from one Data Home to another. We try to issue adequate error messages related to this issue.
6. There is an environment variable to the client startup called LGC\_JAVA\_XMX. You can set this to larger values to allow the Navigator to allocate and use more memory if required. The default value is "1024m" if you do not set it (the SSclient example script say 256m but with this line commented out the seisclient script uses a default of 1024m). You may want to set this up as high as about 3/4 of the available memory available on the node where you are running the Navigator. Other reasons why you may need to increase the memory allocation for the Navigator include:
  - Large JavaSeis Dataset fold maps - especially large 3D frameworks
  - Working in a mode where you select a lot of flows directly from the table for queued submission without bringing the flows into the editor.
  - Working with very large flows (i.e. flows with a lot of processes in them).
7. When using WS4.4 it has been noted that you can get some left over .nfs files that will prevent Area/Line deletes from completing in the Navigator. These can prove to be troublesome to remove and you have to remove them from the command line.
8. ProTab (the new table editor) has a hard functional limit of 160 million lines. This corresponds to roughly 1.2 Gb of RMS stacking velocity table information. The text file size equivalent is smaller by about a factor of 5.
9. When working with JavaSeis Datasets we are aware of the following:

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- Working in heterogeneous environments of hardware and operating systems will be difficult because of the different ways that O\_DIRECT is handled by the operating system vendors. Currently you cannot operate in a mixed environment. If you need O\_DIRECT turned off, jobs will simply fail to write data. If you see cases where the populated area of a dataset shown in the fold map bounces around erratically while the job is being run and the output dataset is incomplete, you have O\_DIRECT turned off when it needs to be on.
- We know that reading sparsely populated JavaSeis datasets do not perform at the theoretical throughput rate of the IO system and is slower than reading non-sparse JavaSeis Datasets. This is a function of the way the IO systems handle caching and how guesses are made related to what disk you will be reading from next. For sparse datasets, the filer O/S guess is typically incorrect.

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## Contacting Support

Landmark software operates Technical Assistance Centers (TACs) in Australia, the United Kingdom, and the United States. Additional support is also provided through local support offices around the world. Local support office information is listed below. If problems cannot be resolved at the district level, our escalation team is called to resolve your incidents quickly.

Support information is always available on the Landmark Support internet page located at:

<http://css.lgc.com/InfoCenter/index?page=home>.

### Technical Assistance Centers

#### North America

7:30 am - 5:30 pm Central Standard Time  
Monday - Friday, excluding holidays

**713-839-2200 (Houston, TX, USA)**

**Toll Free 1-877-435-7542**

**(1-877-HELP-LGC)**

Fax: 713-839-2168 (Houston, TX)

Fax: 907-275-2655 (Anchorage, AK)

Fax: 303-796-0807 (Denver, CO)

Fax: 403-262-1929 (Calgary, Canada)

Email: [support@lgc.com](mailto:support@lgc.com)

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