

## C H A P T E R 2

# Installing HEC-GeoRAS

The installation procedure for HEC-GeoRAS differs between operating systems. However, automated procedures for both Windows NT and UNIX operating systems will assist the user in installing the package of ARC/INFO macros.

This chapter discusses the ARC/INFO requirements and installation instructions for the Windows NT and UNIX operating systems.

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## Hardware and Software Requirements

Before installing HEC-GeoRAS, ARC/INFO Version 7.1 or higher, including the TIN extension, must be installed on the host server. Beyond the hardware and software required to run ARC/INFO, HEC-GeoRAS has minimal additional requirements:

- A mouse.
- A hard disk with 2 megabytes of free space for the HEC-GeoRAS package.
- Disk space for the DTM and RAS Coverages.

The user must also know where to find the ARC/INFO directory before continuing.

Note: If ARC/INFO is reinstalled, HEC-GeoRAS must be reinstalled afterwards.

## Windows NT Installation

HEC-GeoRAS must only be installed on the ARC/INFO server. There are two principle steps to installing HEC-GeoRAS: (1) HEC-GeoRAS must be installed from the setup program and (2) System Environment Variables must be set.

The installation procedure copies a macro into the preexisting directory structure of ARC/INFO; therefore, if ARC/INFO is ever reinstalled, HEC-GeoRAS must be reinstalled.

To install HEC-GeoRAS from Windows NT, complete the following:

1. Know where ARC/INFO is installed.
2. Insert the HEC-GeoRAS 1.0 disk into the drive.
3. From the window explorer, open the HEC-GeoRAS folder.
4. Double click **Setup.exe**.
5. Follow the setup instructions that appear on the screen.
6. Set the Environment Variables.

Installing HEC-GeoRAS requires the user to know the directory where ARC/INFO is installed. This directory is identified as the *Destination Directory* during installation. Based on the location of the *Destination Directory*, a parallel directory *Arc4HEC* will be created to install HEC-GeoRAS. As well, the file *georas.aml* will be copied to the directory *Destination Directory\atool\arc*.

## Setting Environment Variables (Windows NT)

To set the Environment Variables, do the following:

1. Press the **Start** ➔ **Settings** ➔ **Control Panel** from the Windows NT menu bar.
2. From the Control Panel, open the **System** controls and choose the *Environment* tab.
3. Set the *Variable* and *Value* and listed below.

Variable	Value	
CANVASCOLOR	WHITE	
CROSSHAIRCOLOR	MAGENTA	<i>recommended</i>
ARCPANZOOM	ON	
ARCWINDOWSTATS	ON	<i>recommended</i>
ARCINFOFONTNAME	COURIER NEW	<i>recommended</i>
ARCINFOFONTSIZE	8	<i>recommended</i>

## UNIX Installation

HEC-GeoRAS must only be installed on the ARC/INFO server. ARC/INFO must be in place and the ARCHOME environment variable set before HEC-GeoRAS can be installed. The installation procedure writes one file in the ARC/INFO install area (in the *\$ARCHOME/atool/arc* directory), and creates a new directory parallel to the ARC/INFO install directory (i.e., one level above *\$ARCHOME*). You must have write privilege in these directories to perform the installation. Also note that if you reinstall ARC/INFO, you will need to copy the HEC-GeoRAS startup macro to the new atool/arc subdirectory.

There are two principle steps to installing HEC-GeoRAS: (1) HEC-GeoRAS must be installed using the install program and (2) System Environment Variables must be set.

To install HEC-GeoRAS on a Unix system, complete the following:

1. Execute the installation script:  
`<path_to_CD_ROM>/unix/install`  
(On most Sun Solaris systems, this would be  
`/cdrom/cdrom0/unix/install`)
2. Set the Environment Variables (see next section).

(Alternatively, you can cop the files “install” and “georas.tar” from the unix directory on the CD-ROM to any directory on the file system and run the install program from there. Note that the install script and the georas.tar file must be located in the same directory.)

Installing HEC-GeoRAS requires that the ARCHOME environment variable be set for the user doing the installation. The install program will exit if this variable is not set (you can’t run ARC/INFO without this variable, either).

## Setting Environment Variables (UNIX)

To set the Environment Variables, add the following lines to the .cshrc file of all HEC-GeoRAS users.

```
setenv CANVASCOLOR WHITE
setenv ARCPANZOOM ON
setenv CROSSHAIRCOLOR MAGENTA
setenv ARCWINDWSTATS ON
```

## HEC-GeoRAS Files

HEC-GeoRAS files are copied under the *Arc4HEC\GeoRAS* directory. The startup macro *georas.aml* is copied into the *arcexe\atoolarc* directory established when installing ARC/INFO. The directory structure is shown in Figure 2-1.



**Figure 2.1** HEC-GeoRAS directory structure

A complete list of HEC-GeoRAS files is presented below.

Directory	Filename
\aml	*.eaf ( <i>amls</i> )
	*.emf ( <i>menus</i> )
	crosspoint
	get_profile_list
	raspost_fld
	raspost_read
	raspost_top_gui
	raspost_trim
	raspost_wse
	rasprep_banks
	rasprep_label_xs
	rasprep_reach
	rasprep_write_xs
	reachxyz
	streamroute
	label_xs

Directory	Filename	
\gui	*.eaf ( <i>amls</i> )	
	*.emf ( <i>menus</i> )	
	check_covers	about
	contour	check_covers
	create_importfile	contour
	draw_covers	create_importfile
	edit_aat	edit
	editor	edit_aat
	environment	edit_bar
	getcolor	getcolor
	import_rasfile	import_rasfile
	new_cover	new_cover
	printmap	printmap
	project	printmap_bar
	selection	printsetup
	wsp	printtext
	wsp_draw	ras_bar
	wsp_drawmaker	ras_form
	wsp_menumaker	save_as
		snap
		wap_draw_bar
		*.text
		help_contour
		help_editaat
		help_editor
		help_getcolor
	help_importras	
	help_mapping	
	help_printing	
	help_prjmgr	
	help_writeras	
	<i>other</i>	
	blue256	
	georas.lin	
	georas.shd	

Directory	Filename
\gui\icons	*.icon
	about
	add
	arrows
	asterisk16
	attributes
	contour
	copy
	cut
	delete
	export32
	flip
	font16
	geom32
	get16
	import32
	inundation32
	move
	open
	open16
	paint16
	pan16
\lib	*.aml
	2button
	disp_help
	get_routines
	getcover
	getfile
	getitem
	gettin
	getworkspace
	msconfirm
	msinform
	msresponse
	msresponse2
	msworking
	\bin
\arcexe\atool\arc	georas.aml