Chapter 8

Tailoring Installations

This chapter explains how to tailor installations using initialization scripts and the *set* command. Initialization scripts provide a programmatic interface to user-written scripts that execute when Inst or Software Manager receives a distribution specification. The *set* command assigns values to arguments known as *preferences*, which control aspects of the Inst and Software Manager interface. A table of available *set* preferences is included at the end of this chapter (a complete list is also available from Inst online help).

This chapter contains the following sections:

- "Using an Initialization Script"
- "Checking the Current Preference Settings"
- "Controlling Menu Displays"
- "Controlling Disk Space Checks and Reports"
- "Controlling the Display of Filenames"
- "Displaying the Current Distribution Source"
- "Turning Off Initial Selection of Subsystems"
- "Changing the Network Timeout Value"
- "A Closer Look at Preferences"

Note: The procedures in this chapter assume that *set* commands are entered from the Admin menu; however, except where noted, *set* commands can also be entered from the Main menu and View Commands menu.

Using an Initialization Script

The initialization script *inst.init* provides a means to delay an installation session until the appropriate session parameters are set by the script. The primary function of *inst.init* is to redirect a distribution specification to a different source, or to modify the default selections in a distribution. However, because an *inst.init* script can also include the use of selections files and *set* (preferences) commands, you can customize the script to meet a variety of installation requirements. The activation of *inst.init* is specified by the *startup_script* variable (see Table 8-1 for a description of this variable).

By default, if an *inst.init* script is located in a distribution directory, users are notified of the pending execution of the script whenever they specify the distribution directory during an installation session. Unless the user specifies otherwise, *inst.init* executes after the notification. If the specified distribution directory is a remote directory, *inst.init* is copied to the target system to execute (any scripts that *inst.init* calls are not copied to the target system, however).

For example, assume that a user on *babyface* enters one of these commands to install from server *easyboy*:

```
# inst -f easyboy:/d1/IRIX_6.2/dist
Inst> from easyboy:/d1/IRIX_6.2/dist
```

If easyboy 's */d1/.IRIX_6.2/dist* contains a copy of *inst.init*, either of the previous commands copies and executes *inst.init* on babyface before the Inst Main menu is displayed. Similarly, *inst.init* is executed if it is located in the distribution directory when a Software Manager user uses the *Lookup* button.

Syntax of the inst.init Script

The *inst.init* script has this syntax:

`inst.init` [*toolname*] [*pathname*] [*file descriptor*]

Arguments have these meanings:

toolname	has the value *inst* or *swmgr*
pathname	is the specification for the directory that contains *inst.init*
file descriptor	is the file descriptor to which commands can be written

The *inst.init* script can read from *stdin* and write to *stdout* (file descriptor 1) using the controlling tty in Inst sessions; use *xconfirm*(1) for user input and output in Software Manager sessions. The script can also write to *stderr (*file descriptor 2). Messages to *stderr* are posted directly to the user by means of the inst pager during an Inst session or in the log pane during a Software Manager session. Messages to *stderr* are also copied to */var/inst/INSTLOG*, the installation log.

Note: Avoid using *stderr* to write prompts for an interactive Inst session. The inst pager might interfere with the session by writing unwanted lines to the screen.

Writing an inst.init Script

You can write *inst.init* as a shell script, a tcl script, or a binary program. The output of *inst.init* is a set of commands that Inst or Software Manager executes. These commands are supported as output from *inst.init*.

from [distribution]
: specifies the location of the distribution. The *from* command is always executed first.

admin load [*selections file*]
: specifies a selections file to be used for the installation (see “The save and load Commands” in Chapter 5 and the *-F* option of *inst*(1M)). You may use multiple selections files; in this case, all commands are buffered and executed in the order that they are read.

  Note: Any *from* commands in selections files are ignored.

set [*preference*] [*value*]
: sets preferences for Inst or Software Manager operation. Preferences are always set after the *from* command is executed.

install [*software.subsystem*]...
: marks for installation the software products or product components that are specified as arguments.

keep [*software.subsystem*]...
: maintains the current status of software products or product components that are specified as arguments

remove [*software.subsystem*]...
: marks software products or product components for removal.

Additional inst.init Script Rules

Keep these additional points in mind when creating an *inst.init* script:

- The *from* command executes first—the last *from* command returned by the script sets the distribution. All other commands are executed in the order in which the script sends them to *inst* for execution.
- All *from* commands in selections files are ignored.
- Lines written to the command descriptor must not begin with a space or tab character.
- Abbreviations and wildcards are supported in *install*, *keep*, and *remove* commands.
- Abbreviations of *from*, *set*, and *admin load* commands are not supported.

Sample inst.init Scripts

This sample *inst.init* script resets the distribution directory and notifies users of the change. Then the script retains all currently installed software in its current state, except InPerson; it installs all Inperson subsystems from the distribution except the man pages.

```
#!/sbin/sh
OLDPATH= $2
NEWPATH= yankee:/usr/dist
echo "$OLDPATH is unavailable"
echo "installing from $NEWPATH"
echo "from $NEWPATH" >&$3
echo "k *" >&$3
echo "i InPerson" >&$3
echo "k InPerson.man" >&$3
exit 0
```

Example 8-1 Sample inst.init Script

This sample script determines the release and sets the distribution directory accordingly:

```
#!/sbin/sh
#
# Run uname to determine the release and set the distribution directory
REL=`uname -r`
case $REL in
6.1*) echo "from $2/dist/6.1" >&$3 ;;
6.2*) echo "from $2/dist/6.2" >&$3 ;;
esac
```

Using README Files in a Distribution

Whenever a file named *inst.README* is located in a distribution directory, the content of the file is displayed whenever users specify the distribution directory during an installation session. README contents might be special instructions about the software in this distribution, cautions, or other information that users might need before starting an installation session.

Your can also use an HTML version of the README file. This file, *inst.README.html,* contains HTML rather than plain text and is displayed when the distribution is specified from Software Manager.

Checking the Current Preference Settings

To see your current preferences settings, enter the *set* command with no arguments:

`Inst>` **`set`**

The output contains a line showing the name, the current setting, and a brief description of each preference.

For help on a particular preference, specify the preference in your entry:

`Inst>` **`set`** *preference*

The output contains a paragraph description of the preference, its name, type, and current value.

Controlling Menu Displays

By default, Inst displays the Main menu when it is invoked; menus show only a subset of the commands that can be entered at the `Inst>` and `Admin>` prompts. The following sections tell you how to change this default behavior.

Turning Off Menu Displays

To suppress the menu display when Inst is invoked, enter this command:

```
Admin> set menus off
```

When *menus* is set off, only the `Inst>` prompt is displayed when Inst is invoked. To return to the default behavior, enter this command:

```
Admin> set menus on
```

The value of *menus* is saved in the installation history database; its value is maintained for subsequent Inst sessions.

Displaying Hidden Commands

At each menu, several commands are available but not normally displayed. On the Inst Main menu, the hidden commands are *set*, *sh*, and *shroot*. On the Administrative Commands menu, the hidden commands are *help* and *quit*. On the View Commands menu, the hidden commands are *set*, *help*, and *quit*. The Interrupt menu contains no hidden commands; the *retry* command appears when Inst displays the Interrupt menu on errors, but *retry* is not available when you display the Interrupt menu manually.

Use this entry to set hidden commands on:

```
Inst> set fullmenu on
```

The value of *fullmenu* is saved in the installation history database; its value is maintained for subsequent Inst sessions.

Redisplaying the Menu

Since Inst does not redisplay the current menu after each command entry, you must request that the menu be redisplayed when you need it. The current menu is displayed if you press **<Enter>** (when the *menus* preference is set on), or if you enter a question mark (*?*). (The question mark is considered a pseudo-command because it never appears on menus.)

Controlling Disk Space Checks and Reports

Disk space checking enables Inst to make accurate estimates of whether disk space on a system is sufficient for the software selected for installation. The estimates help you determine which software to install or remove if disk space is limited.

Space calculations determine the amount of free disk space in all mounted filesystems, the disk space required for each subsystem, the temporary requirement for disk space during the installation process, and the net change in disk space if a subsystem is installed or removed. If a detailed space check is requested, Inst also checks the disk for any deleted files, and for any local modifications to the installed software.

You see this message when Inst performs space checking:

```
Calculating sizes:
```

The space checks performed during *list* and *step* processing calculate the net amount of space that your selections will require after installation. The space checks performed during *go* processing calculate the net space requirement and the additional space that will be required during the installation process.

Estimated and Detail Space Checks

Inst performs two types of disk space calculations: *estimated space checks,* which are based on the information in the Inst history file; and *detailed space checks,* in which Inst accesses file size information on the disk to perform its calculations. By default, estimated space checks are performed when you use the *from* command to change the distribution source and when you use the *list* or *step* command to make selections. Detailed space checking is always performed after you enter the *go* command to initiate installation. You can change these defaults using *set* command preferences.

Note: You can disable all space checking with the *space_check* preference, but disabling space checking is not advised (see Inst help for details).

Changing Detail Space Checking

There may be times when you need very accurate disk space calculations throughout an installation session (when a target has limited disk space, for example). In this case, you can use the *detailspacecheck* preference of the *set* command to force detailed space checking to be performed during *list* and *step* processing as well as during *go* processing. To force additional detail space checking, enter this *set* command before you enter the *list* or *step* command in the session:

```
Admin> set detailspacecheck on
```

Inst saves the value of *detailspacecheck* in the installation history, so it is not necessary to reset this preference if you wish to maintain this level of checking in subsequent sessions. However, increasing the number of detail space checks also increases the amount of time required for the interactive portion of an installation session (the amount of time required for *go* processing remains the same, regardless of the *detailspacecheck* setting).

To return to the default space checking behavior, enter this command:

```
Admin> set detailspacecheck off
```

Delaying Disk Space Checking

The *delayspacecheck* preference of the *set* command allows you to postpone disk space checking until after you enter the *go* command. Delaying space checking reduces the amount of time needed for the interactive portion of an installation session. However, when you delaying space checking, disk space information is not displayed in the output of *list* and *step* commands—subsystem sizes are listed as zero.

To postpone disk space checking until you enter the *go* command, enter this command before entering the first *list* or *step* command:

```
Admin> set delayspacecheck on
```

Inst saves the value of *delayspacecheck* in the installation history database, so it is not necessary to reset this preference if you wish to delay space checking in subsequent installations.

To return to the default space checking behavior, enter this command:

```
Admin> set delayspacecheck off
```

Minimizing Disk Space Checking Time

When you want to install only one product and the distribution source contains many products, you can reduce the amount of space checking time by including the product name when specifying the distribution source. When you specify a product in the distribution source, checking is limited to the disk space requirements of the individual product rather than the entire distribution.

These entries illustrate how to specify an individual product as the distribution source:

```
# inst -f source/product
Inst> from source/product
Inst> from $dist/product
```

The *from* command must be entered before a *list* or *step* command that triggers disk space checking (the *source*, *product*, and *$dist* arguments are described in “Alternative Ways to Specify a Distribution” on page 83).

Controlling the Display of Filenames

By default, Inst does not report the names of files as it installs and removes them. The *set* preferences described below allow you to modify this behavior and control the way that file names are displayed.

To display filenames as they are installed, enter this command before you enter the *go* command:

```
Admin> set show_files on
```

To return to no display of filenames as they are installed, enter this command at any prompt:

```
Admin> set show_files off
```

The value of *show_files* is saved in your installation history database, so it has the same value from one installation session to the next until you change it.

By default, when filenames are displayed during installation and removal, each filename replaces the one that was displayed before it. To change the display so that each name is displayed on a new line, enter this command:

```
Admin> set overprint off
```

To return to the default behavior, enter this command:

```
Inst> set overprint on
```

The value of *overprint* is saved in the installation history database, so it is not necessary to reset it in subsequent installation sessions.

Displaying the Current Distribution Source

The current distribution source is displayed in a message above the Main menu when Inst is invoked. The message has one of these forms:

```
Default distribution to install from: source
Default distribution to install from: source/product
```

Depending on your situation, *source* includes one or more of these items: a user ID, a remote target name, and a directory or tape device. If you specified a product name when you invoked Inst (*inst -f*), *product* is the name of the software product that you specified (for live installations only). The complete syntax of *source* and *source/product* is entered in "Step 2: Specifying the Source" on page 42 and "Alternative Ways to Specify a Distribution" on page 83.

Each time you enter the *from* command, the current distribution source changes. You can display the current distribution source by entering this command from any menu:

```
Inst> set dist
Preference          Type          Value
...
dist                String        last_source

Inst>
```

The value of *dist* is *last_source*, which is a character string (*string*). The value of *last_source* is always the same as *source* (the current distribution), with one exception: After Inst is invoked, but before product descriptors are read for the first time, the value of *dist* is the distribution source that was specified in the previous installation session. If you use a distribution source of the form *source/product*, *product* is not included in the value of *dist*.

Turning Off Initial Selection of Subsystems

Each time you invoke Inst or enter a *from* command, Inst ignores any installation or removal selections that were not performed; it uses its own algorithms to select subsystems for installation. You can override this selection of subsystems, but any pending installation or removal selections are still erased.

To prevent Inst from making selections after you enter the *from* command, enter this command:

```
Inst> set autoselect off
```

Turning *autoselect* off means that the only *i* characters in the first column of *list* output are selections that you made yourself. To turn automatic selection back on, use this command:

```
Inst> set autoselect on
```

The value of *autoselect* is saved in the installation history database; if you set it off, it remains off in future Inst sessions until you change its value.

Changing the Network Timeout Value

Inst allows you to specify a network timeout value. This value specifies the length of time that Inst waits for responses from a remote system before giving up.

Use the *set* command to display and set the timeout value:

```
Admin> set
     Preference  Value      Description
     ...
     timeout     180       Network timeout, in seconds
     ...
Inst> set timeout 120
```

A minimum value of 120 seconds is recommended. The value of *timeout* is saved in the installation history database; when you find a value of *timeout* that works for your site, you can leave it permanently set (unless network conditions change and timeout errors begin to occur).

A Closer Look at Preferences

Preferences allow you to tailor the installation utility so that it operates suitably for a single user or user group. In most cases, preference settings apply to both Inst and Software Manager (exceptions are *tty* preferences, which apply exclusively to Inst, and *gui* preferences, which apply exclusively to Software Manager).

Preferences are classified on the basis of their duration. *Permanent* preferences retain their settings until they are reset; *transient* preferences revert to a default setting at the start of a new installation session. A third group of preferences have potential to cause installation errors when set arbitrarily; these preferences are classified as *expert*.

Most preferences are assigned simple Boolean values; that is, you use the *set* command to turn them on or off. You can also substitute *true* (for *on*) and *false* (for *off*) when setting these preferences. These examples illustrate equivalent command pairs:

```
Admin> set beep on
Admin> set beep true

Admin> set short_names off
Admin> set short_name false
```

The Preferences File

In the factory-shipped configuration of *inst*, preference settings are stored in the */var/inst/resources* file. However, whenever the original setting for a permanent preference is changed, the new setting is recorded in the *.swmgrrc* file, which is automatically created at the first change. The automatically generated copy is stored in the root directory, *$rbase*, for the new software installation at *$rbase/var/inst/.swmgrrc.*

Each line of the *.swmgrrc* file contains the name of a preference and its assigned values. Example 8-2 illustrates the format of *.swmgrrc* entries. It illustrates settings that are expressed as boolean, single choice, multi-value, and integer values.

```
auto_inst_new: true
display_size: blocks
inst_visible_resources: tty,transient,permanent,beginner,expert
network_retries: 4
```

Example 8-2 Sample *.swmgrrc* File

Creating Additional Preferences Files

You can create and store additional copies of *.swmgrrc* to tailor preferences for a particular system or for individual users. When multiple copies of *.swmgrrc* exist, the settings that they contain are added to the settings in *$rbase/var/inst/.swmgrrc*. If conflicting settings are recorded for a particular preference, the most user-specific setting takes precedence, as explained below.

You or individual users can create additional *.swmgrrc* files in these locations, in order of highest to lowest precedence:

$HOME/.swmgrrc
: Contains preference settings for all installation sessions that the user initiates (except miniroot installations) and resides in the user's home directory on the target system. Takes precedence over settings in *$rbase/var/inst/.swmgrrc*, */var/inst/.swmgrrc*, and *$rbase/$HOME/.swmgrrc*.

$rbase/$HOME/.swmgrrc
: Contains an individual user's preference settings for miniroot installations and resides in a special home directory for the installation (a subdirectory of the root directory for the newly installed software, such as *$rbase/var/people/$HOME*, for example). Takes precedence over settings in *$rbase/var/inst/.swmgrrc* and */var/inst/.swmgrrc*.

/var/inst/.swmgrrc
: Contains preference settings that are used for all installations performed on the target by any user. Whereas the effects of the *$rbase/var/inst/.swmgrrc* file are restricted to the root directory for the new software (*$rbase*), */var/inst/.swmgrrc* affects installations to any filesystem on the target.

When Inst or Software Manager is invoked, existing *.swmgrrc* files are read in this order:

1. */var/inst/.swmgrrc*
2. *$rbase/var/inst/.swmgrrc*
3. *$rbase/$HOME/.swmgrrc*
4. *$HOME/.swmgrrc*

When preference settings are added to *.swmgrrc*, the new values are recorded in the file that was opened last. As a result, preference settings are recorded in the most localized version of the *.swgrrc* file that is open during the installation session.

The Preferences List

The tables in this section describe the preferences that you can specify with the *set* command or from the Customize Installation menus in Software Manager to control the installation process. They list the name of the preference, describe the function that the preference performs, and list the default setting for the preference. Expert preferences are identified in the first column. The fourth column, *Value Saved?*, indicates whether the preference remains in effect for subsequent installation sessions (*yes*) or reverts to a default value at the start of a new session (*no*).

Table 8-1 contains preferences that affect both Inst and Software Manager.

Note: Some preferences in this table contain advisories in the Function column. Be sure to read these advisories carefully before resetting the preference to which they pertain.

Table 8-1 Preferences That Affect Inst and Software Manager

Preference Name	Function	Default Setting	Value Saved?
abort_on_error (Expert)	Controls whether an automatic installation is aborted if an error occurs. If *true* (default), an error cancels the installation; if *false*, the installation continues after the error occurs. Regardless of setting, errors are reported in */var/inst/INSTLOG*.	true	yes
always_confirm_quit	Controls whether the user is always asked to confirm a *quit* command. If *true*, user must confirm a quit; if *false* (default), no user confirmation is needed after *quit*.	false	yes
autoselect	Controls whether *inst* does an automatic selection of subsystems during initialization and when a new distribution source is specified. If *true* (default), *inst* automatically selects subsystems at these events in the session; if *false*, no subsystems are automatically selected.	true	yes
beep (Expert)	Controls whether an audible signal is given *after go* processing is complete. If *true* (default), audible signal rings when *go* processing finishes; if *false*, no signal is given.	true	yes

Table 8-1 (continued) Preferences That Affect Inst and Software Manager

Preference Name	Function	Default Setting	Value Saved?
checkpoint_restart (Expert)	Set during a session recovery, when the user selects the action to take after an abnormal exit. If *true*, the user chose to retry the interrupted installation using the selections made during the session; if *false* (default), the user chose to either return to the previous session without attempting to install selected software or to ignore the previous session completely.	false	no
checkpoint_selections (Expert)	Controls whether installation and removal selections are saved in the checkpoint file so they can be used in a session recovery. If *true*, user selections are saved in the file as soon as they are made; if *false* (default), pending selections are saved when the user enters the *go* command.	false	yes
confirm_quit	Controls the confirmation prompt for *quit* commands when selections are pending. If *true* (default), users are notified if install or removal selections are pending when they enter *quit*; if *false*, users are allowed to quit the session without a reminder of pending selections.	true	yes
confirm_nfs_installs	Controls whether user is prompted to confirm installation on NFS mounted filesystems. If *on* (default), user is prompted for confirmation; if *off*, files are installed in the NFS filesystem if the user has proper permissions.	on	yes
default_config (Expert)	Controls handling of configuration files. If *true*, all configuration files that are in the distribution are installed; if the target version was modified, it is saved in a file with a *.O* extension. If *false* (default) and the target version was modified, install the distribution version of the configuration files, appending a *.N* extension; if the target version was not modified, overwrite it with the new file.	false	yes

Table 8-1 (continued) Preferences That Affect Inst and Software Manager

Preference Name	Function	Default Setting	Value Saved?
delayspacecheck	Controls the timing of disk space calculations. If *on*, disk space calculations are deferred until the *go* or *space* commands are entered, and no space information is provided when *list* or *step* commands are entered; if *off* (default), space calculations are performed at the first *list*, *step*, or *space* command, unless disk space checking was done previously.	off	yes
detailspacecheck	Controls the source of the data used in space checking. If *on*, space requirements for files are determined by checking their sizes on the disk; if *off* (default), file sizes are assumed to be the value that is recorded in the installation history database. **Advisory:** Set *on* for slower, more accurate, calculations.	off	yes
delay_conflics	Controls whether messages for delayable conflicts (those caused by incompatible software selections), normally posted before installation is performed, are delayed until Inst or Software Manager exit. Valid settings are *ask*, *on*, and *off*. If *ask* (default), the user is prompted after the first delayable conflict to specify whether subsequent conflict messages should be delayed; the specification remains in effect for the remainder of the session unless the user changes it. If *on*, delayable conflicts are always postponed until Inst or Software Manager exit. If *off*, conflicts are presented prior to software installation.	ask	yes
dist	Specifies the value of the current distribution source. For live installations, the default value is the previously specified source. For miniroot installations, *dist* must be specified. Product names are not saved as part of the value.	*source*	yes

Table 8-1 (continued) Preferences That Affect Inst and Software Manager

Preference Name	Function	Default Setting	Value Saved?
hide_image_products (Expert)	Controls whether the image components of each product are displayed when the product list is displayed. If *true* (default), listings of products do not include their component images. If *false*, the image components of a product are displayed in product listings.	true	yes
http_cache (Expert)	Turns local caching on and off for installations from network servers that require hypertext transfer protocol (HTTP). If *off* (default), file caching is done on the server system; if *on*, file caching is done on the target system. **Advisory**: Set to *on* when network is slow to ensure safe transfers.	off	yes
http_cache_tmp_dir (Expert)	Specifies the temporary directory for holding files that are cached during installations from HTTP servers.	*/var/tmp*	yes
http_picky (Expert)	Specifies whether the distribution specification file on the HTTP server must have a special format; this format indicates that software distribution is not centralized in a single directory. If *true* (default), the distribution specification file has a special format; if *false*, a normal HTML directory listing, generated by the http server, can be read as a distribution.	true	yes
inst_initial_level (Expert)	Controls the initial setting of the *view* command. If *subsystem* (default), the output of *list* displays the subsystems in each product that appears in the listing; if *image*, the output of *list* displays the images for each product that appears in the listing; if *product*, the output of *list* displays product names without product components.	subsystem	yes

Table 8-1 (continued) Preferences That Affect Inst and Software Manager

Preference Name	Function	Default Setting	Value Saved?
install_identical_files (Expert)	Controls whether files are installed if the distribution version appears identical to the version installed on the target. If *true*, identical distribution files are installed. If *false*, distribution files are not installed when they appear identical.	true	yes
install_sites (Expert)	Contains the list of previous distribution sources (also see the *install_site_size* preference).	N/A	yes
neweroverride	Controls whether older products can replace newer ones. If *on*, users can install older products in place of new ones; if *off* (default), older products cannot be installed when a more recent version exists on the target.	off	no
override_space_check (Expert)	Controls whether space checking is performed. If *true*, no space checking is done during an installation, allowing disk overflows. If *false* (default), space checking is performed. **Advisory**: Setting *true* can cause serious installation problems.	false	no
post_install_dialog (Expert)	Controls whether a completion notice is posted when an installation is completed. If *true* (default), a completion notice is posted. If *false*, the user sees a message only if a reboot is required.	true	yes
promptforid (Expert)	Controls whether user is prompted to specify unknown user IDs (UIDs) and group IDs (GIDs). If *true*, user is prompted for a UID if one is not found in */etc/passwd* and a GID if one is not found in */etc/group*. If *false* (default), inst assigns a UID and GID based on the *startid* preference and writes them to */usr/adm/SYSLOG*.	false	yes

Table 8-1 (continued) Preferences That Affect Inst and Software Manager

Preference Name	Function	Default Setting	Value Saved?
rulesoverride	Controls whether conflicts can be overwritten. If *on*, incompatible subsystems and subsystems without prerequisites may be installed on the target. If *off* (default), incompatibilities and prerequisites must be resolved before installation is done. **Advisory**: Use *on* setting with caution.	off	no
set_path (Expert)	Specifies the value to use when setting the *$PATH* variable for exit operations. If *default* (default), set to a known path; if *environment*, set path to *$PATH* environment variable or use the default path if *$PATH* is not set; if *specific*, use the value in *set_path_specific* preference.	default	yes
set_path_specific (Expert)	Specifies the path to use for exit operations. Value is a user-supplied string.	N/A	yes
shell	Specifies the program to use for the *sh* and *shroot* Administrative commands. Usually this value is either */bin/sh* or */bin/csh*.	*/bin/csh*	yes
short_names	Controls product names in listings. If *true*, only the shortname is displayed in listings; if false, product descriptions are displayed instead of their shortnames.	false	yes
show_absolute_sizes	Sets *list* and *step* displays to provide absolute subsystem sizes rather than relative sizes (a comparison between the size of the distribution subsystem and its corresponding subsystem on the target). If *on*, the absolute subsystem size is displayed; if *off* (default) the relative size is displayed. **Advisory**: Default unit of measure is kilobytes. See also *display_size*.	off	no

Table 8-1 (continued) Preferences That Affect Inst and Software Manager

Preference Name	Function	Default Setting	Value Saved?
show_files (Expert)	Controls whether filenames are displayed during installation. If *true*, each component file in a product is displayed as it is installed; if *false* (default), the product name is displayed as it is installed.	false	yes
show_hidden_resources (Expert)	Controls whether user is shown expert preferences in addition to basic preferences. If set to *false* (default), user sees only basic preferences; if set to *true*, user sees expert and basic preferences.	false	yes
show_lint (Expert)	Determines whether inconsistencies in the distribution are displayed during reading (for debugging). If *true*, inconsistencies are displayed; if *false* (default), inconsistencies are not reported.	false	yes
space_check (Expert)	Controls whether space checking is performed. If *true* (default), space checking is done at various points in the installation (see the *delayspacecheck* preference). If *false*, no space checking is performed. **Advisory**: Setting *false* can cause serious installation problems.	true	no
startid	Sets the starting value of UIDs and GIDs when this information is unknown to *inst* and *promptforid* preference is set off (also see *promptforid* preference). The value of *startid* is assigned to the first unknown UID and GID; subsequent unknown UIDs and GIDs are incrementa by 1.	60000	yes

Table 8-1 (continued) Preferences That Affect Inst and Software Manager

Preference Name	Function	Default Setting	Value Saved?
startup_script	Controls how Inst and Software Manager treat the initialization script file, *inst.init*. If set to *prompt* (default), the user is prompted before the script file is executed and the README file is displayed if one exists; for non-interactive installations in which the setting is *prompt* and the initialization file exists, Inst or Software Manager exit. If set to *ignore*, *inst.init* is always ignored. If set to *execute*, *inst.init* always executes without prompting the user.	prompt	no
timeout	Specifies the amount of time, in seconds, that *inst* allows for a reply from a remote host before retrying the connection. Two retries are done after the initial attempt. **Advisory**: Set to a value that is suitable for your network.	120 seconds	yes
verbose (Expert)	Works with *verbosity* preference to control the number of information messages that appear during installation sessions (see also *verbosity*). If *off* (default), messages are set to verbosity level 2; if *on*, messages are set to verbosity level 4. If both *verbose* and *verbosity* settings are changed, the most recent setting takes precedence.	off	yes
verbosity (Expert)	Controls the number of informational messages that are displayed during an installation session (see also *verbose)*. Valid settings are *0*, silent; *2*, verbose off; *4*, verbose on*; 6,* all generated messages. When *verbose* and *verbosity* are changed, the most recent setting takes precedence.	2	yes
verify_checksum (Expert)	Controls whether files are verified by checksum as they are uncompressed or read from the archives. If *true* (default), checksum verification is performed. If *false*, no checksum verification is made.	true	yes

Table 8-2 contains preferences that affect only Inst.

Note: Some preferences in this table contain advisories in the Function column. Be sure to read these advisories carefully before resetting the preference to which they pertain.

Table 8-2 Preferences That Affect Inst Only

Preference Name	Function	Default Setting	Value Saved
always_page_inst	Controls whether requested information, such as progress messages during go processing, are displayed in page segments or scrolled off the screen. If true, requested information is displayed in page segments; if false (default), information that is longer than a page scrolls off the screen.	false	no
clearprompt	Controls how throw-away prompts are displayed. If *true* (default), these prompts are cleared from a line by overwriting with blank spaces; if *false*, the original prompts remain on the line and a new line is generated to display a new prompt. **Advisory**: Set to false on terminals that do not perform line clearing.	true	yes
display_size	Controls the unit of measure for subsystem sizes. Valid settings are *kbytes* (default), *kilobytes*, *bytes*, or *512-byte blocks*.	kbytes	no
fullmenu	Controls the display of hidden commands (but not their availability) on the Main menu, Administrative Commands menu, and View Commands menu. If *on*, hidden commands appear on these menus; if *off* (default), hidden commands do not appear.	off	yes

Table 8-2 (continued) Preferences That Affect Inst Only

Preference Name	Function	Default Setting	Value Saved
inst_terse_mode (Expert)	Restricts messages that are displayed on the screen. If *false* (default), user sees standard status messages, warnings and errors. If *true*, most status messages are repressed and only warnings, errors, and output requested by the user are posted. *True* also forces off *page_output*, *show_diskspace*, *show_legend*, *show_percent_done*, and *show_files*, and sets *verbosity* to 1. See also *verbose* preference, *admin save* and *admin load* commands, and the *inst* (1M) option *-F* <selections file>.	false	yes
inst_visible_resources	Controls the list of preferences that are displayed when the *set* command is entered with no arguments (see also *swmgr_visible_resources*). This preference takes multiple values: *tty* (default) specifies that the displayed list should contain all preferences that apply to the Inst interface; *permanent* (default) specifies that the displayed list should contain all preferences whose value is maintained in subsequent sessions (until the value is reset); *transient* specifies that the displayed list should contain all whose value reverts to a default at the end of a session; *beginner* (default) limits the displayed list to all preferences that are not designated *expert*; *expert* specifies that the displayed list contain all preferences whose settings have potentially adverse effects on installation. **Advisory**: In your entry, separate values with a comma; no spaces are allowed.	tty permanent transient beginner	yes

Table 8-2 (continued) Preferences That Affect Inst Only

Preference Name	Function	Default Setting	Value Saved
menus	Controls whether menus are displayed automatically. If *on* (default), Main menu is displayed at startup and all menus are displayed when they are invoked; if *off*, menus are not displayed at startup or invocation, but users can display them manually by entering *?* at the menu prompt. **Advisory**: Set *off* for experienced Inst users.	on	yes
overprint	Controls the display of the software listing during installation (or removed). If *on* (default), the same line is used to display the name of each software item as it is installed; the name is overwritten when the next item is installed. If *off*, a new line is used to display each name; the list scrolls down the screen.	on	yes
page_output	Controls tty device output. If *true* (default), output is managed by paging that is similar to *more* (see the more(1M) reference page); if *false*, output scrolls off the screen.	true	no
show_diskspace	Controls whether a disk space summary is displayed by the *list*, *step*, and *recalculate* commands. If *true* (default), the disk space summary is displayed. If *false*, disk space summaries are suppressed for *list*, *step*, and *recalculate* commands, but can be displayed with the *admin space* command. See also *inst_terse_mode*.	true	yes
show_legend	Controls the legend for *list* displays. If *true*, the output of *list* contains an explanation of the mnemonic tags that appear in the listing; if *false*, the legend is not posted.	true	yes

Table 8-2 (continued) Preferences That Affect Inst Only

Preference Name	Function	Default Setting	Value Saved
show_percent_done (Expert)	Controls whether task completion messages are posted. If *true* (default), Inst posts periodic messages during various processing tasks to report the percentage of the task that is completed. If *false*, no task completion messages are posted.	true	no
wrapmode	Controls whether displayed lines will wrap or truncate at the screen width limit. If *wrap* (default), lines longer than the screen width wrap to the next line; if *truncate*, lines are truncated at the limit of the screen width.	wrap	yes

Table 8-3 contains preferences that affect Software Manager only.

Table 8-3 Preferences That Affect Software Manager Only

Preference Name	Function	Default Setting	Value Saved
auto_inst_new	Controls whether new products are selected for installation when installation is automatic. If true, all new products are installed during an automatic installation. If false (default), new products are omitted from automatic installations.	false	yes
auto_inst_upgrades	Controls whether upgrade products are selected for installation when installation is automatic. If *true* (default), all upgrade products are installed during an automatic installation. If *false*, upgrade products are omitted from automatic installations.	true	yes
background (Expert)	Controls whether Software Manager is run as a background or foreground task when invoked from an IRIX shell. If *true* (default), Software Manager runs as a background task; if *false*, Software Manager runs as a foreground task.	true	yes

Table 8-3 (continued) Preferences That Affect Software Manager Only

Preference Name	Function	Default Setting	Value Saved
custom_startup_mode (Expert)	Controls how Software Manager is initially presented. If *off* (default), Software Manager always starts in Automatic Installation mode (selections are automatically made at initialization). If *distribution*, it starts in Customize Installation mode (the user makes selections) if a distribution was specified; if no distribution was specified, it starts in Automatic Installation mode. If *always*, Inst starts in Customize Installation mode if a distribution was specified; if no distribution was specified, it starts in Manage Installed Software mode (actions apply to target software only).	off	yes
never_resize_pane (Expert)	Controls whether pane is resized when switching the selection mode (see *custom_startup_mode* preference). If *true* (default), the pane size remains the same for all selection modes. If *false*, pane size is changed when the selection modes are changed.	true	yes
space_indicator	Controls format of space-checking information. Valid settings are *pie*, *bar*, and *text*.	pie	yes
space_update_interval (Expert)	Specifies in seconds the frequency with which the Disk Space area is automatically updated; these updates are in addition to the updates that occur when product selections are change. Valid settings are integers; updates are disabled if set to *0*.	10	yes
swmgr_initial_level (Expert)	Controls the level of the product hierarchy that is displayed when Software Manager is invoked. Valid settings are *product* (default) and *subsystem*.	product	yes

Table 8-3 (continued) Preferences That Affect Software Manager Only

Preference Name	Function	Default Setting	Value Saved
swmgr_visible_resources	Controls the set of preferences that are visible in the Preferences dialog (see also *inst_visible_resources*). These settings are valid: if *none*, no preferences are displayed in the dialog; if *permanent* (default), the dialog contains all preferences whose values are retained for subsequent installation sessions (until the value is changed); if *transient*, the dialog contains preferences whose settings revert to a default at the end of a session; if *beginner* (default), the dialog contains all preferences that are not designated *expert*; if *expert*, the dialog contains preferences whose settings have potentially adverse effects on installation.	beginner permanent	yes
use_last_dist (Expert)	Controls the contents of the Available Software field. If *true*, the last distribution source that was used is automatically entered in this field at startup. If *false*, this field is empty at startup.	false	yes