

Universidad Rey Juan Carlos

Ingeniería de robótica software

SISTEMAS OPERATIVOS

MASH Documentation Guide

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Contents

	In	troduction					
ΙΙ	C	ode					
1 Shell							
\mathbf{I}	[;	Syntax					
;	Bui	ltin commands					
	2.1	Alias					
	2.2	Exit					
	2.3	Cd					
	2.4	Test					
		TC 1					
	2.5	Ifok					

Part I Introduction

Introduction on the mash shell

Part II Code

1 Shell

Orden de busqueda de comandos: alias - builtin - script in directory - path

Part III Syntax

Only for ASCII characters, if used for another type it won't work as expected.

— = Default or copy

Color = Change in syntax table

Subsect = Substitute by output of command inside

Extended Syntax Table							
Character	Standard	File	Substitution	'Single Quote'	"Double Quote"		
\0	end_line	end_file	end_sub	request_new_line	request_new_line		
$\setminus t$	blank	end_file_started	$\mathrm{end}_\mathrm{sub}$				
n	blank	${ m end_file}$	$\mathrm{end}_\mathrm{sub}$		${\tt request_new_line}$		
Space	blank	end_file_started	$\mathrm{end}_\mathrm{sub}$				
"	start_dquote	$start_dquote$	$\mathrm{end}_\mathrm{sub}$		end_dquote		
#	comment	${ m end_file}$	copy_and_end_sub				
\$	$start_sub$	$start_sub$	copy_and_end_sub		$start_sub$		
&	background	${ m end_file}$	$\mathrm{end}_\mathrm{sub}$				
,	$start_squote$	$start_squote$	end _ sub	${ m end_squote}$			
(error	error	$\mathrm{end}_\mathrm{sub}$				
)	error	error	end _ sub				
*	do_glob	do_glob	end_sub				
-			copy_and_end_sub				
;	end_pipe	${ m end_file}$	end _ sub				
<	$start_file_in$	${ m end_file}$	end _ sub				
>	start_file_out	${ m end_file}$	end _ sub				
?	do_glob	do_glob	copy_and_end_sub				
@			copy_and_end_sub				
	do_glob	do_glob	end _ sub				
\	escape	escape	end _ sub		esp_escape		
_		${ m end_file}$	copy_and_end_sub				
- { }	$ m here_doc$	error	$\mathrm{end}_\mathrm{sub}$				
}	error	error	$\mathrm{end}_\mathrm{sub}$				
	pipe_tok	${ m end_file}$	$\mathrm{end}_\mathrm{sub}$				
~	tilde_tok	${ m tilde_tok}$	$\mathrm{end}_\mathrm{sub}$				
Rest							
&&	and	end _file	end _ sub				
	or	${ m end_file}$	${ m end_sub}$				
\$($\operatorname{subexec}$	$\operatorname{subexec}$			subexec		
&>	start_file_out	${ m end_file}$	${ m end_sub}$				
2>	start_file_out	${ m end_file}$	end _ sub				
1>	start_file_out	end _file	end _ sub				

Basic Syntax Table								
Character	Standard	File	Substitution					
\0	end_line	end_file	end _ sub					
$\setminus t$	blank	end_file_started	$\mathrm{end}_\mathrm{sub}$					
n	blank	${ m end_file}$	$\mathrm{end}_\mathrm{sub}$					
Space	blank	$end_file_started$	$\mathrm{end}_\mathrm{sub}$					
"			$\mathrm{end}_\mathrm{sub}$					
#		${ m end_file}$	${\tt copy_and_end_sub}$					
\$	$start_sub$	$start_sub$	${\tt copy_and_end_sub}$					
&	background	${ m end_file}$	$\mathrm{end}_\mathrm{sub}$					
,			$\mathrm{end}_\mathrm{sub}$					
(error	error	$\mathrm{end}_\mathrm{sub}$					
)	error	error	$\mathrm{end}_\mathrm{sub}$					
*	do_glob	do_glob	$\mathrm{end}_\mathrm{sub}$					
-			$copy_and_end_sub$					
;		${ m end_file}$	$\mathrm{end}_\mathrm{sub}$					
<	$start_file_in$	${ m end_file}$	$\mathrm{end}_\mathrm{sub}$					
>	$start_file_out$	${ m end_file}$	$\mathrm{end}_\mathrm{sub}$					
?	do_glob	$ m do_glob$	$copy_and_end_sub$					
@			$copy_and_end_sub$					
[do_glob	do_glob	$\mathrm{end}_\mathrm{sub}$					
\			$\mathrm{end}_\mathrm{sub}$					
_		${ m end_file}$	$copy_and_end_sub$					
{	$ m here_doc$	error	$\mathrm{end}_\mathrm{sub}$					
}	error	error	$\mathrm{end}_\mathrm{sub}$					
	pipe_tok	end_file	${ m end_sub}$					
~	${ m tilde_tok}$	${ m tilde_tok}$	$\mathrm{end}_\mathrm{sub}$					
Rest								

2 Builtin commands

Explicacion de los builtins

2.1 Alias

Alias builtin

2.2 Exit

Exit builtin

2.3 Cd

Cd builtin

2.4 Test

Test builtin

2.5 Ifok

Ifok builtin

2.6 Ifnot

Ifnot builtin

Part IV Dash Scripting

Explanation of how to mash script

Bibliography

[1] Boney, L., Tewfik, A.H., and Hamdy, K.N., "Digital Watermarks for Audio Signals," *Proceedings of the Third IEEE International Conference on Multimedia*, pp. 473-480, June 1996.