

A.4 Grammar of the Pattern Files

The typographic conventions used for the pattern file grammar are the same as for the network file grammar (see section A.3.1.1).

A.4.1 Terminal Symbols

WHITE	{ " " "\t" }	
FREE	{ ^ "\n" }	/* anything up to EOL */
COMMENT	"#" FREE "\n"	
L_BRACKET	"["	
R_BRACKET	"]"	
INT	["0"-"9"]	
V_NUMBER	[Vv]{INT}+"."{INT}+	/* version number */
NUMBER	[-+]? { {INT}+ {INT}+{EXP} {INT}+"."{INT}*({EXP})? {INT}*"."{INT}+({EXP})? }	
EXP	[Ee] [-+]? {INT}+	
VERSION_HEADER	"SNNS pattern definition file"	
GENERATED_AT	"generated at" {FREE}* "\n"	
NO_OF_PATTERN	"No. of patterns" {WHITE}* ":"	
NO_OF_INPUT	"No. of input units" {WHITE}* ":"	
NO_OF_OUTPUT	"No. of output units" {WHITE}* ":"	
NO_OF_VAR_IDIM	"No. of variable input dimensions" {WHITE}* ":"	
NO_OF_VAR_ODIM	"No. of variable output dimensions" {WHITE}* ":"	
MAXIMUM_IDIM	"Maximum input dimensions" {WHITE}* ":"	
MAXIMUM_ODIM	"Maximum output dimensions" {WHITE}* ":"	
NO_OF_CLASSES	"No. of classes" {WHITE}* ":"	
CLASS_REDISTRIB	"Class redistribution" {WHITE}* ":"	
REMAPFUNCTION	"Remap function" {WHITE}* ":"	
REMAP_PARAM	"Remap parameters" {WHITE}* ":"	

A.4.2 Grammar

pattern_file	::= header pattern_list
header	::= VERSION_HEADER V_NUMBER GENERATED_AT NO_OF_PATTERN NUMBER i_head [o_head] [vi_head] [vo_head] [cl_head] [rm_head]
i_head	::= NO_OF_INPUT NUMBER
o_head	::= NO_OF_OUTPUT NUMBER
vi_head	::= NO_OF_VAR_IDIM NUMBER MAXIMUM_IDIM actual_dim
vo_head	::= NO_OF_VAR_ODIM NUMBER MAXIMUM_ODIM actual_dim
cl_head	::= NO_OF_CLASSES NUMBER [cl_distrib]
rm_head	::= REMAPFUNCTION NAME [rm_params]
actual_dim	::= L_BRACKET actual_dim_rest R_BRACKET L_BRACKET R_BRACKET
actual_dim_rest	::= NUMBER actual_dim_rest NUMBER
cl_distrib	::= CLASS_REDISTRIB L_BRACKET paramlist R_BRACKET
rm_params	::= REMAP_PARAM L_BRACKET paramlist R_BRACKET
paramlist	::= NUMBER paramlist NUMBER

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pattern_list      ::= pattern | pattern_list pattern
pattern          ::= pattern_start pattern_body pattern_class
pattern_start     ::= [actual_dim]
pattern_body      ::= NUMBER | pattern_body NUMBER
pattern_class     ::= NUMBER | NAME
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