Bell-LaPadula Symbols

symbol	what it represents
S	set of subjects
O	set of objects
P	set of rights
$\underline{r} \in P$	read right
$\underline{a} \in P$	write right (equivalent to append)
$\underline{w} \in P$	read and write right
$\underline{e} \in P$	empty right
C	set of clearances (for subjects) or classification (for objects)
K	set of categories
$L = C \times K$	set of security levels
$f_s(s)$	maximum security level of subject s
$f_c(s)$	current security level of subject s
$f_o(o)$	security level of object o
$F = \{(f_s, f_o, f_c)\}$	set of functions to map entity into security level
$f = (f_s, f_o, f_c)$	an element of the set F
H	set of hierarchy functions $h \in H$, where $h : O \to \mathbb{P}(O)$
M	set of possible access control matrices
$V = \{(b, m, f, h)\}$	set of states of system
b	access control matrix m that excludes rights not allowed by f
R	set of requests for access
D	set of outcomes
$\underline{y} \in D$	the access is allowed
$\underline{n} \in D$	the access is not allowed
$\underline{i} \in D$	the request is illegal
$\underline{e} \in D$	an error offered in processing the request
$W \subseteq R \times D \times V \times V$	set of actions of the system
$X = R^N$	set of sequences of requests
$Y = D^N$	set of sequences of decisions
$Z = V^N$	set of sequences of states
$\Sigma(R, D, W, z_0) \in X \times Y \times Z$	system representation