

Appendix B – Verbs in \$Utils Packages

\$building_utils

:make_exit	:object_audit_string
:set_names	:"do_audit do_prospectus"
:recreate	:do_audit_item
:parse_names	:size_string
:audit_object_category	

\$byte_quota_utils

:initialize_quota	:preliminary_reimburse_quota
:init_for_core	:value_bytes
:adjust_quota_for_programmer	:"object_bytes object_size"
:bi_create	:do_summary
:enable_create	:summarize_one_user
:disable_create	:recent_object_bytes
:parse_create_args	:measurement_task
: "creation_permitted verb_addition_permitted property_addition_permitted"	:can_peek
:all_characters	:can_touch
:display_quota	:do_breakdown
:get_quota	:object_overhead_bytes
:charge_quota	:property_overhead_bytes
:reimburse_quota	:verb_overhead_bytes
:set_quota	:add_owned_object
:get_size_quota	:measurement_task_nofork
:display_quota_summary	:measurement_task_body
:quota_remaining	:schedule_measurement_task
	:task_perms
	:property_exists

\$code_utils

:eval_d	:show_verbdef
:"toint tonum"	:explain_verb_syntax
:toobj	:"verb_p*erms verb_permi*ssions"
:toerr	:verb_loc*ation
:error_name	:verb_documentation
:show_object	:set_verb_documentation
:show_property	

:parse_propref	:task_owner
:parse_verbref	:argstr
:parse_argspec	:verbname_match
:prepositions	:substitute
:short_prep	:show_who_listing
:full_prep	:_egrep_verb_code_all
:get_prep	:_grep_verb_code_all
:_fix_preps	:verb_usage
:find_verb_named	:verb_frame
:find_last_verb_named	:verb_all_frames
:find_callable_verb_named	:move_verb
:find_verbs_containing	:move_prop*erty
:_find_verbs_containing	:eval_d_util
:find_verbs_matching	:display_callers
:_find_verbs_matching	:callers_text
:_grep_verb_code	: "set_property_value
:_egrep_verb_code	set_verb_or_property"
:_parse_audit_args	:owns_task
:help_db_list	:dflag_on
:help_db_search	:type_str
:corify_object	:dump_properties
:inside_quotes	:dump_preamble
:verb_or_property	:dump_verbs
:task_valid	

\$command_utils

:object_match_failed	:suspend_if_needed
: "player_match_result	:dump_lines
player_match_failed"	:explain_syntax
:read	:do_huh
:read_lines	:task_info
:yes_or_no	:init_for_core
:read_lines_escape	:kill_if_laggy
:suspend	:validate_feature
:running_out_of_time	

\$convert_utils

: "dd_to_dms dh_to_hms"	: "C_to_F degC_to_degF"
: "dms_to_dd hms_to_dh"	:convert
:rect_to_polar	:_do_convert
:polar_to_rect	:_try_metric_prefix
: "F_to_C degF_to_degC"	:_format_units

```

:"K_to_C degK_to_degC"
:"C_to_K degC_to_degK"
:"F_to_R degF_to_degR"

:"R_to_F degR_to_degF"
:_do_value

```

\$gender_utils

```

:set
:add
:get_pronoun
:get_conj*ugation

:_verb_plural
:_verb_singular
:_do
:pronoun_sub

```

\$list_utils

```

:make
:range
:map_prop*erty
:map_verb
:map_arg*s
:map_builtin
:find_insert
:remove_duplicates
:arrayset
:setremove_all
:append
:reverse
:_reverse
:compress
:sort
:sort_suspended
:slice
:assoc
:iassoc
:iassoc_suspended
:assoc_prefix

:iassoc_prefix
:iassoc_sorted
:sort_alist
:sort_alist_suspended
:randomly_permute
:count
:flatten
:"longest shortest"
:check_nonstring_tell_lines
:reverse_suspended
:_reverse_suspended
:randomly_permute_suspended
  suspended
:swap_elements
:"random_item random_element"
:assoc_suspended
:amerge
:passoc
:setmove
:iassoc_new
:build_alist

```

\$lock_utils

```

:init_scanner
:scan_token
:canonicalize_spaces
:parse_keyexp
:parse_E
:parse_A

:eval_key
:match_object
:unparse_key
:eval_key_new
:parse_A_new

```

\$match_utils

:match	: "parse_ordinal_reference
:match_nth	parse_ordref"
:match_verb	: "parse_possessive_reference
:match_list	: "object_match_failed
	: "init_for_core

\$math_utils, \$strig_utils

:xsin	:BLFromInt
:xcos	:IntFromBL
:factorial	: "gcd greatest_common_divisor"
:pow	: "lcm least_common_multiple"
:fibonacci	: "are_rel_prime
:geometric	are_relatively_prime"
:divmod	:base_conversion
:combinations	:norm
:permutations	:sin
:simpson	:cos
:parts	:tan
:sqrt	: "arcsin asin"
:div	: "arccos acos"
:mod	: "arctan atan"
:exp	: "deg2rads deg2rad"
:aexp	: "rads2deg rad2deg"
:random	:precision
:random_range	:round
:is_prime	: "mean average"
:AND	:sum_float
:XOR	: "sum_int sum"
:OR	:rint
:NOT	

\$matrix_utils

: "vector_add vector_sub	:identity
vector_mul vector_div"	:null
: "matrix_add matrix_sub"	:is_square
:transpose	:is_null
:determinant	:is_identity
:inverse	

: "cross_prod outer_prod vector_prod"	: column
: "norm length"	: matrix_mul
: submatrix	: "scalar_matrix_mul scalar_matrix_div"
: "dot_prod inner_prod scalar_prod"	: is_matrix
: dimension*s	: is_vector
: order	: "is_reflexive is_areflexive"
: "scalar_vector_add scalar_vector_sub scalar_vector_mul scalar_vector_div"	: "is_symmetric is_asymmetric"
: subtended_angle	: "is_transitive is_atransitive"
	: _relation_result
	: is_partial_ordering

\$Subject_utils

: has_property	: connected
: "all_properties all_verbs"	: isoneof
: has_verb	: defines_verb
: has_callable_verb	: defines_property
: match_verb	: "has_any_verb has_any_property"
: isa	: "has_readable_prop*erty hrp"
: ancestors	: "descendants descendents"
: ordered_descendants	: leaves
: contains	: branches
: all_contents	: "descendants_suspended descendents_suspended"
: findable_properties	: leaves_suspended
: owned_properties	: branches_suspended
: property_conflicts	: "disown disinherit"
: descendants_with_property_sus pended	: accessible_verbs
: locations	: accessible_properties
: "all_properties_suspended all_verbs_suspended"	

\$Subject_quota_utils

: initialize_quota	: display_quota
: init_for_core	: "get_quota quota_remaining"
: adjust_quota_for_programmer	: charge_quota
: bi_create	: reimburse_quota
: creation_permitted	: set_quota
: "verb_addition_permitted property_addition_permitted"	: preliminary_reimburse_quota
	: can_peek

:can_touch

\$perm_utils

:controls :"controls_prop*erty
:apply controls_verb"
:caller :_chparent

\$quota_utils

:initialize_quota :preliminary_reimburse_quota
:init_for_core :value_bytes
:adjust_quota_for_programmer :"object_bytes object_size"
:bi_create :do_summary
:enable_create :summarize_one_user
:disable_create :recent_object_bytes
:parse_create_args :measurement_task
:"creation_permitted
 verb_addition_permitted
 property_addition_permitted"
:all_characters :can_peek
:display_quota :can_touch
:get_quota :do_breakdown
:charge_quota :object_overhead_bytes
:reimburse_quota :property_overhead_bytes
:set_quota :verb_overhead_bytes
:get_size_quota :add_owned_object
:display_quota_summary :measurement_task_nofork
:quota_remaining :measurement_task_body
 :schedule_measurement_task
 :task_perms
 :property_exists

\$seq_utils

:"add remove" :last
:contains :size
:complement :from_string
:union :firstn
:tostr :lastn
:for :range
:extract :expand
:tolist :contract
:from_list :_union
:from_sorted_list :intersection
:first

\$set_utils

```
:union                                : "difference_suspended
:intersection                          diff_suspended"
:diff*erence                          :equal
:contains                              :intersection_preserve_case
:"exclusive_or xor"
```

\$string_utils

```
:space                                :_cap_property
:left                                  :pronoun_sub
:right                                 :pronoun_sub_secure
:"centre center"                      :pronoun_quote
:"columnize columnise"                :alt_pronoun_sub
:from_list                             :explode
:english_list                          :words
:names_of                              :word_start
:from_seconds                          :to_value
:trim                                   :prefix_to_value
:triml                                  :_tolist
:trimr                                  :_unquote
:strip_chars                           :_toscalar
:strip_all_but                         :parse_command
:"uppercase lowercase"                :from_value
:"capitalize capitalise"              : "print print_suspended"
:literal_object                       :reverse
:match                                  :char_list
:match_str*ing                         :regexp_quote
:match_object                          :connection_hostname_bsd
:match_player                          :connection_hostname
:match_player_or_object                :from_value_suspended
:find_prefix                           :end_expression
:index_d*elimited                      :first_word
:"is_integer is_numeric"               :common
:ordinal                               : "title_list*c list_title*c"
:group_number                          : "name_and_number nn
:english_number                        name_and_number_list
:english_ordinal                       nn_list"
:english_ones                           : "columnize_suspended
:english_tens                           columnise_suspended"
:subst*itute                            :a_or_an
:substitute_d*elimited                 :index_all
```

: "match_stringlist match_string_list"	: match_suspended
: from_ASCII	: incr_alpha
: to_ASCII	: is_float
: abbreviated_value	: inside_quotes
: _abbreviated_value	: strip_all_but_seq

\$time_utils

: day	: from_month
: month	: dst_midnight
: ampm	: time_sub
: to_seconds	: "mmddy ddmmyy"
: sun	: parse_english_time_interval
: from_ctime	: seconds_until_date
: "dhms dayshoursminutessseconds"	: seconds_until_time
: english_time	: rfc822_ctime
: from_day	: "mmddyyyy ddmmyyyy"

\$wiz_utils

: set_programmer	: show_netwho_listing
: set_player	: show_netwho_from_listing
: set_owner	: "check_player_request check_reregistration"
: set_property_owner	: make_player
: unset_player	: send_new_player_mail
: set_property_flags	: do_make_player
: _set_property_flags	: do_register
: random_password	: do_new_password
: queued_tasks	: set_owner_new
: isnewt	: boot_idlers
: initialize_owned	: grant_object
: verify_owned_objects	: connection_hash
: "connected_wizards connected_wizards_unadvertis ed"	: newt_player
: "all_wizards_advertised all_wizards all_wizards_unadvertised"	: unset_programmer
: rename_all_instances	: is_wizard
: missed_help	: expire_mail
: show_missing_help	: expire_mail_weekly
: init_for_core	: check_prog_restricted
	: expire_mail_players
	: expire_mail_lists
	: flush_editors


```
:random_wizard  
:set_email_address
```

```
:get_email_address
```