Index

A

Abstract(Request), 329
add argument, 71
add argument to pattern, 163
add argument with XDR-interpreted value, 133
add byte-array value to list of values for message's named context, 23
add byte-array value to pattern's named context, 167
add character-string value to property, 217
add imbedded nulls to pattern, 165
add integer value, 62
add integer value to list of values for message's context, 49
add item to spec property, 236
add new argument, 57
add new argument to a pattern, 178
add new argument to pattern, 195
add operation number, 183
add string value to pattern's context, 173
add value to address field, 162
add value to class information, 172
add value to disposition field, 176
add value to file field, 177
add value to object field, 181
add value to object type field, 184
add value to operation field, 182
add value to scope field, 186
add value to sender field, 187
add value to sending process's ptype field, 188
add value to session field, 189
add value to state field, 190
add XDR-interpreted byte-array value to list of values for message's named context, 246
add XDR-interpreted byte-array value to pattern's named context, 197
adda new argument to a message object, 100
adding arguments when replying to a message, 57
adds byte-string to spec property, 226
adds byte-string value for named property, 212
adds integer value to pattern's context, 180
adds string value to list of values for message's context, 27
allocate storage on ToolTalk API allocation stack, 53

archive files and ToolTalk objects, 271
assign object type value to object spec, 242

B

/bin/sh: application_name not found, 275

C

Cannot open display, 276
change value, 66
check status, 52
check ToolTalk databases, 255
close current procid, 26
context values, removing duplicates, 25
convert type tables, 249
copy all objects, 40
copy files and directories, 253
create copy of specified message, 87
create message, 138, 141, 198, 201
create new message object, 86
create spec in memory for object, 228
create wrappers, function to, 74
Created(Notice), 294

D

de-archive files and ToolTalk objects, 271
Deleted(Notice), 294
Deposit(Request), 332
deserialize data from message argument, 67
deserialize data from message's context, 83
destroy all objects, 43
destroy message, 88
destroy pattern object, 175
destroys object's spec, 230
display ToolTalk databases, 255
Display(Request), 334, 337
Do_Command(Request), 295

E

Edit(Request), 337, 340
error identifiers, allocation, 277
error messages
/bin/sh: application_name: not found, 275
Cannot open display, 276
ld.so: libtt.so.1.1: not found, 275
TT_DESKTOP_CANCELLED, 292
TT_DESKTOP_EACCES, 333
TT_DESKTOP_EACCESS, 291
TT_DESKTOP_ECANCELLED, 306
TT_DESKTOP_EFAULT, 304
TT_DESKTOP_EINVAL, 291, 304, 338
TT_DESKTOP_ENODATA, 331, 333, 335, 338, 345, 348, 351
TT_DESKTOP_ENOENT, 291, 308, 333, 335, 338, 341, 345, 348, 351
TT_DESKTOP_ENOMSG, 291, 304, 306
TT_DESKTOP_ENOTSUP, 292
TT_DESKTOP_EPROTO, 292
TT_DESKTOP_UNMODIFIED, 292, 308
TT_ERR_ACCESS, 282
TT_ERR_ADDRESS, 283
TT_ERR_APPFIRST, 287
TT_ERR_CATEGORY, 286
TT_ERR_CLASS, 281
TT_ERR_DBAVAIL, 281
TT_ERR_DBCONSIST, 286
TT_ERR_DBEXIST, 281
TT_ERR_DBFULL, 286
TT_ERR_DBUPDATE, 286
TT_ERR_DISPOSITION, 284
TT_ERR_FILE, 281
TT_ERR_INTERNAL, 285
TT_ERR_LAST, 287
TT_ERR_MATCH, 297
TT_ERR_MODE, 281
TT_ERR_NO_MATCH, 285
TT_ERR_NO_VALUE, 285
TT_ERR_NOMATCH, 304
TT_ERR_NOMEM, 287

TT_ERR_NOMP, 282
TT_ERR_NOTHANDLER, 282
TT_ERR_NUM, 282
TT_ERR_OBJID, 282
TT_ERR_OP, 282
TT_ERR_OTYPE, 283
TT_ERR_OVERFLOW, 286
TT_ERR_PATH, 283
TT_ERR_POINTER, 283
TT_ERR_PROCID, 283
TT_ERR_PROPLEN, 284
TT_ERR_PROPNAME, 284
TT_ERR_PTYPE, 284
TT_ERR_PTYPE_START, 286
TT_ERR_READONLY, 285
TT_ERR_SCOPE, 284
TT_ERR_SESSION, 284
TT_ERR_SLOTNAME, 287
TT_ERR_STATE, 287
TT_ERR_UNIMP, 285
TT_ERR_VTYPE, 285
TT_ERR_XDR, 287
TT_MEDIA_ERR_ENOENT, 331
TT_MEDIA_ERR_FORMAT, 328, 331, 333, 336, 339, 342, 345, 348, 351
TT_MEDIA_ERR_SIZE, 328, 331
TT_MEDIA_NO_CONTENTS, 341
TT_OK, 280
TT_STATUS_LAST, 287
TT_WRN_APPFIRST, 281
TT_WRN_LAST, 281
TT_WRN_NOTFOUND, 280
TT_WRN_SAME_OBJID, 280
TT_WRN_STALE_OBJID, 280
TT_WRN_START_MESSAGE, 280
TT_WRN_STOPPED, 280
ttsession: Illegal environment, 276
error messages, alphabetical listing of, 277
error messages, Desktop Services, 291
error messages, Document and Media Exchange, 328
error messages, initialization, 275
error messages, listing by message id, 280

F

fill in category field, 171
free all storage allocated on ToolTalk API allocation stack, 209
free storage from ToolTalk API allocation stack, 48

G

Get_Environment(Request), 310
Get_Geometry(Request), 312
Get_Iconified(Request), 314
Get_Locale(Request), 315
Get_Mapped(Request), 317
Get_Modified(Request), 297
Get_Situation(Request), 319
Get_Status(Request), 298
Get_Sysinfo(Request), 299
Get_XInfo(Request), 320

I

instruct ToolTalk to find all objects in the named file, 45
instruct ToolTalk to pass objids to filter function, 45
Interpret(Request), 343

J

join named session, 214
joining multiple sessions, calls required, 36

L

ld.so: libtt.so.1.1: not found, 275
Lower(Request), 307

M

make named session the default session, 214

mark storage position in ToolTalk API allocation stack, 54
merge compiled ToolTalk types file into running ttsession, 223
message not offered to other processes of same ptype, 92
message server, 265
message sets
Desktop Services
Created, 294
Deleted, 294
Do_Command, 295
Get_Environment, 310
Get_Geometry, 312
Get_Iconified, 314
Get_Locale, 315
Get_Mapped, 317
Get_Modified, 297
Get_Situation, 319
Get_Status, 298
Get_Sysinfo, 299
Get_XInfo, 320
Lower, 307
Modified, 301
Moved, 302
Pause, 303
Quit, 305
Raise, 307
Resume, 303
Revert, 308
Reverted, 301
Save, 308
Saved, 309
Set_Environment, 310
Set_Geometry, 312
Set_Iconified, 314
Set_Locale, 315
Set_Mapped, 317
Set_Situation, 319
Set_XInfo, 320
Signal, 322
Started, 323
Status, 324
Stopped, 323
Document and Media Exchange
Abstract, 329
Deposit, 332
Display, 334, 337
Edit, 337, 340
Interpret, 343
Print, 346
Translate, 349
Modified(Notice), 301
move files, 261
Moved(Notice), 302
moves all objects, 43

O

object moved to different file, 232

P

Pause(Request), 303
Print(Request), 346
process cannot handle message, 113
process cannot handle request, 92
process has handled message, 114
process interested in specific messages, 42
process is no longer interested in session, 222
process not interested in specific messages, 47

Q

Quit(Request), 305

R

Raise(Request), 307
re-address copy of specific message to parent, 87
register callback function, 74, 168
register pattern with ToolTalk, 185
register process type with ToolTalk, 204
remove all objects, 41
remove files or directories, 263

remove given byte-array value from list of values for message's context., 25
remove integer value from list of values for message's context, 50
remove XDR-interpreted byte-array value from list of values for message's context, 247
removes string value from list of values for message's context, 28
rename files, 261
repair ToolTalk databases, 255
replace all current charater string values, 219
replace any current byte-string values, 213
replace any current byte-string values stored under this spec property, 227
replace any values of property, 238
request new pattern object, 174
Resume(Request), 303
retrieve address attribute, 55
retrieve byte-array value, 59
retrieve byte-array value and length of message's context, 78
retrieve character string of message's context, 82
retrieve character string stored with status attribute, 128
retrieve class attribute, 76
retrieve current default procid, 31
retrieve current default ptype, 33
retrieve current default session identifier, 35
retrieve data from message argument, 67
retrieve data from message's context, 83
retrieve disposition attribute, 89
retrieve file attribute, 93
retrieve group identifier attribute, 95
retrieve handler attribute, 96
retrieve handler ptype attribute, 97
retrieve identifier of message, 103
retrieve integer value of message's context, 79
retrieve object attribute, 104
retrieve object type attribute, 109
retrieve operation attribute, 106
retrieve operation number attribute, 108
retrieve scope attribute, 115
retrieve sender attribute, 120
retrieve sender ptype attribute, 121
retrieve session attribute, 123
retrieve state attribute, 125
retrieve status attribute, 126
retrieve type, 64
retrieve user identifier attribute, 130
retrieve user information stored in data cells, 131
retrieve value of named propert, 210
retrieve value of property, 234
retrieve value of specified property, 224
retrieves integer value, 61
retrieves name of file containing specified object, 231
return base otype, 142
return callback automatically, 153, 206
return category value, 170
return current default file, 29
return data type of argument, 147, 157
return element of named property list, 220
return element of property name for object spec, 239
return file descriptor, 39
return handle for next queued message, 112
return initial session identifier of ttsession, 51
return integer error object that encodes, 38
return i-th otype, 143
return matched pattern, 111
return mode, 63
return mode of agument, 145

return name of a message's nth context, 81
return name of object type, 241
return number of arguments, 149, 159
return number of arguments in message, 70
return number of contexts in message, 85
return number of notice signatures, 160
return number of otypes, 144
return number of property names for object, 240
return number of request signatures, 150
return number of values in spec property, 237
return number of values stored under named property, 218
return op name of notice signature, 161
return operation name of request signature, 151
return pointer to a status message, 244
return pointer to value, 65
return process identifier, 139
return session associated with X window display, 245
return status of error object, 52
return status of specified pointer, 200, 203
return the mode of argument, 155
return unique key of objid, 137
return value in indicated user data cell, 192
return value of specified session property, 215
returns number of currently-defined property names, 221
returns whether indicated ptype is already installed, 205
Revert(Request), 308
Reverted(Notice), 301
rpc.ttdbserverd, 260
RPC-based ToolTalk database server, 260

S

Save(Request), 308
Saved(Notice), 309
send message, 117
send message if process exits unexpectedly, 118
serialize data into existing message arguments, 69
session identifiers, multiple for one session, 35
session, ToolTalk concept of, 265
set address attribute, 56
set byte-array value and type, 60
set byte-array value of message's context, 73
set character string value of message's context, 80
set character string with status attribute, 129
set class attribute, 77
set current default procid, 32
set current default session identifier, 36
set data into existing message arguments, 69
set default file to specified file, 30
set default ptype, 34
set file attribute, 94
set handler attribute, 99
set handler ptype attribute, 98
set integer value of message's context, 102
set object attribute, 105
set operation attribute, 107
set otype attribute, 110
set scope attribute, 116
set sender ptype attribute, 122
set session attribute, 124
set status attribute, 127
set value to given integer, 100, 178
set XDR-interpreted byte-array value of a message's contex, 135
Set_Environment(Request), 310

Set_Geometry(Request), 312
Set_Iconified(Request), 314
Set_Locale(Request), 315
Set_Mapped(Request), 317
Set_Situation(Request), 319
Set_XInfo(Request), 320
sets default procid, 139
sets disposition attribute, 90
Signal(Request), 322
specify whether otype derived directly or indirectly, 152
Started(Notice), 323
state process has initialized, 54
state process is ready to accept messages, 54
Status(Notice), 324
Stopped(Notice), 323
store information in user data cells, 194
store user information in data cells, 132
subsequent calls after tt_close, 26

T

test whether two objids are equal, 136
ToolTalk commands
- rpc.ttdbserverd, 260
- tt_type_comp, 269
- ttce2xdr, 249
- ttcp, 253
- ttdbck, 255
- ttdbserverd, 260
- ttmv, 261
- ttrm, 263
- ttrmdir, 263
- ttsession, 265
- tttar, 271

Translate(Request), 349
Tt_address, 4
tt_bcontext_join, 23
tt_bcontext_quit, 25
TT_BOTH, 7
Tt_callback, 4
TT_CALLBACK_CONTINUE, 4
TT_CALLBACK_PROCESSED, 4
Tt_category, 5
Tt_class, 5
tt_close, 26
- making subsequent calls after calling, 26

tt_context_join, 27
tt_context_quit, 28, 50
TT_CREATED, 8
tt_default_file, 29
tt_default_file_set, 30
tt_default_procid, 31
tt_default_procid_set, 32
tt_default_ptype, 33
tt_default_ptype_set, 34
tt_default_session, 35
tt_default_session_set, 36
TT_DESKTOP_CANCELED, 292
TT_DESKTOP_EACCES, 333
TT_DESKTOP_EACCESS, 291
TT_DESKTOP_ECANCELED, 306
TT_DESKTOP_EFAULT, 304
TT_DESKTOP_EINVAL, 291, 304, 338
TT_DESKTOP_ENODATA, 331, 333, 335, 338, 345, 348, 351
TT_DESKTOP_ENOENT, 291, 308, 333, 335, 338, 341, 345, 348, 351
TT_DESKTOP_ENOMSG, 291, 304, 306
TT_DESKTOP_ENOTSUP, 292
TT_DESKTOP_EPROTO, 292
TT_DESKTOP_UNMODIFIED, 292, 308
TT_DISCARD, 6
Tt_disposition, 6
TT_ERR_ACCESS, 282
TT_ERR_ADDRESS, 283
TT_ERR_APPFIRST, 287
TT_ERR_CATEGORY, 286
TT_ERR_CLASS, 281
TT_ERR_DBAVAIL, 281
TT_ERR_DBCONSIST, 286

TT_ERR_DBEXIST, 281
TT_ERR_DBFULL, 286
TT_ERR_DBUPDATE, 286
TT_ERR_DISPOSITION, 284
TT_ERR_FILE, 281
TT_ERR_INTERNAL, 285
TT_ERR_LAST, 287
TT_ERR_MODE, 281
TT_ERR_NO_MATCH, 285, 297
TT_ERR_NO_VALUE, 285
TT_ERR_NOMATCH, 304
TT_ERR_NOMEM, 287
TT_ERR_NOMP, 282
TT_ERR_NOTHANDLER, 282
TT_ERR_NUM, 282
TT_ERR_OBJID, 282
TT_ERR_OP, 282
TT_ERR_OTYPE, 283
TT_ERR_OVERFLOW, 286
TT_ERR_PATH, 283
TT_ERR_POINTER, 283
TT_ERR_PROCID, 283
TT_ERR_PROPLEN, 284
TT_ERR_PROPNAME, 284
TT_ERR_PTYPE, 284
TT_ERR_PTYPE_START, 286
TT_ERR_READONLY, 285
TT_ERR_SCOPE, 284
TT_ERR_SESSION, 284
TT_ERR_SLOTNAME, 287
TT_ERR_STATE, 287
TT_ERR_UNIMP, 285
TT_ERR_VTYPE, 285
TT_ERR_XDR, 287
tt_error_int, 38
tt_error_pointer, 38
TT_FAILED, 8
tt_fd, 32, 39
TT_FILE, 7
tt_file_copy, 40
tt_file_destroy, 41
TT_FILE_IN_SESSION, 7
tt_file_join, 42
tt_file_move, 43
tt_file_objects_query, 45
tt_file_quit, 47
Tt_filter_action, 6
TT_FILTER_CONTINUE, 6
TT_FILTER_STOP, 6
tt_free, 48
TT_HANDLE, 5
TT_HANDLED, 8
TT_HANDLER, 4
tt_icontext_join, 49
TT_IN, 7
tt_initial_session, 51
TT_INOUT, 7
tt_int_error, 52
tt_is_err, 52
tt_malloc, 53
tt_mark, 54
TT_MEDIA_ERR_ENOENT, 331
TT_MEDIA_ERR_FORMAT, 328, 331, 333, 336, 339, 342, 345, 348, 351
TT_MEDIA_ERR_SIZE, 328, 331
TT_MEDIA_NO_CONTENTS, 341
tt_message_accept, 54
tt_message_address, 55
tt_message_address_set, 56
tt_message_arg_add, 57
tt_message_arg_bval, 59
tt_message_arg_bval_set, 60
tt_message_arg_ival, 61
tt_message_arg_ival_set, 62
tt_message_arg_mode, 63
tt_message_arg_type, 64
tt_message_arg_val, 65
tt_message_arg_val_set, 66
tt_message_arg_xval, 67
tt_message_arg_xval_set, 69

tt_message_args_count, 70
tt_message_bcontext_set, 73
tt_message_callback_add, 74
tt_message_class, 76
tt_message_class_set, 77
tt_message_context_bval, 78
tt_message_context_ival, 79
tt_message_context_set, 80
tt_message_context_slotname, 81
tt_message_context_val, 82, 85
tt_message_context_xval, 83
tt_message_create, 86
tt_message_create_super, 87
tt_message_destroy, 88
tt_message_disposition, 89
tt_message_disposition_set, 90
tt_message_fail, 92
tt_message_file, 93
tt_message_file_set, 94
tt_message_gid, 95
tt_message_handler, 96
tt_message_handler_ptype, 97
tt_message_handler_ptype_set, 98
tt_message_handler_set, 99
tt_message_iarg_add, 100
tt_message_icontext_set, 102
tt_message_id, 103
tt_message_object, 104
tt_message_object_set, 105
tt_message_op, 106
tt_message_op_set, 107
tt_message_opnum, 108
tt_message_otype, 109
tt_message_otype_set, 110
tt_message_pattern, 111
tt_message_receive, 112
tt_message_reject, 113
tt_message_reply, 114
tt_message_scope, 115
tt_message_scope_set, 116
tt_message_send, 117
tt_message_send_on_exit, 118
tt_message_sender, 120
tt_message_sender_ptype, 121
tt_message_sender_ptype_set, 122
tt_message_session, 123
tt_message_session_set, 124
tt_message_state, 125
tt_message_status, 126
tt_message_status_set, 127
tt_message_status_string, 128
tt_message_status_string_set, 129
tt_message_uid, 130
tt_message_user, 131
tt_message_user_set, 132
tt_message_xarg_add, 133
tt_message_xcontext_set, 135
Tt_mode, 7
TT_NOTICE, 5
TT_OBJECT, 4
tt_objid_equal, 136
tt_objid_objkey, 137
TT_OBSERVE, 5
TT_OK, 280
tt_onotice_create, 138
tt_open, 139
tt_orequest_create, 141
TT_OTYPE, 4
tt_otype_base, 142
tt_otype_derived, 143
tt_otype_deriveds_count, 144
tt_otype_hsig_arg_mode, 145
tt_otype_hsig_arg_type, 147
tt_otype_hsig_args_count, 149
tt_otype_hsig_count, 150
tt_otype_hsig_op, 151
tt_otype_is_derived, 152
tt_otype_opnum_callback_add, 153
tt_otype_osig_arg_mode, 155
tt_otype_osig_arg_type, 157

tt_otype_osig_args_count, 159
tt_otype_osig_count, 160
tt_otype_osig_op, 161
TT_OUT, 7
tt_pattern_address_add, 162
tt_pattern_arg_add, 163
tt_pattern_barg_add, 71, 165
tt_pattern_bcontext_add, 167
tt_pattern_callback_add, 168
tt_pattern_category, 170
tt_pattern_category_set, 171
tt_pattern_class_add, 172
tt_pattern_context_ad, 173
tt_pattern_create, 174
tt_pattern_destroy, 175
tt_pattern_disposition_add, 176
tt_pattern_file_add, 177
tt_pattern_iarg_add, 178
tt_pattern_object_add, 180, 181
tt_pattern_op_add, 182, 183
tt_pattern_otype_add, 183, 184
tt_pattern_register, 185
tt_pattern_scope_add, 186
tt_pattern_sender_add, 187
tt_pattern_sender_ptype_add, 188
tt_pattern_session_add, 189
tt_pattern_state_add, 190
tt_pattern_unregister, 191
tt_pattern_user, 192
tt_pattern_user_set, 194
tt_pattern_xarg_add, 195
tt_pattern_xcontext_add, 197
tt_pnotice_create, 198
tt_pointer_error, 200
tt_prequest_create, 201
TT_PROCEDURE, 4
tt_ptr_error, 203
tt_ptype_declare, 174, 204
tt_ptype_exists, 205
tt_ptype_opnum_callback_add, 206
tt_ptype_undeclare, 208
TT_QUEUE, 6
TT_QUEUED, 8
TT_REJECTED, 8
tt_release, 209
TT_REQUEST, 5
Tt_scope, 7
TT_SENT, 8
TT_SESSION, 7
tt_session_bprop, 210
tt_session_bprop_add, 212
tt_session_bprop_set, 213
tt_session_equal, 214
tt_session_join, 214
tt_session_prop, 215
tt_session_prop_add, 217
tt_session_prop_count, 218
tt_session_prop_set, 219
tt_session_propname, 220
tt_session_propnames_count, 221
tt_session_quit, 222
tt_session_types_load, 223
tt_spec_bprop, 224
tt_spec_bprop_add, 226
tt_spec_bprop_set, 227
tt_spec_create, 228
tt_spec_destroy, 230
tt_spec_file, 231
tt_spec_move, 232
tt_spec_prop, 234
tt_spec_prop_add, 236
tt_spec_prop_count, 237
tt_spec_prop_set, 238
tt_spec_propname, 239
tt_spec_propnames_count, 240
tt_spec_type, 241
tt_spec_type_set, 242
tt_spec_write, 243
TT_START, 6
TT_STARTED, 8

Tt_state, 8
Tt_status, 8
TT_STATUS_LAST, 287
tt_status_message, 244
tt_type_comp command, 269
TT_WRN_APPFIRST, 281
TT_WRN_LAST, 281
TT_WRN_NOTFOUND, 280
TT_WRN_SAME_OBJID, 280
TT_WRN_STALE_OBJID, 280
TT_WRN_START_MESSAGE, 280
TT_WRN_STOPPED, 280
tt_X_session, 245
tt_xcontext_join, 246
tt_xcontext_quit, 247
ttce2xdr command, 249
ttcp command, 253
ttdbck command, 255
ttdbserverd, 260
ttmv command, 261
ttrm, 263
ttrmdir, 263
ttsession comman, 265
ttsession: Illegal environment, 276
tttar command, 271
type compiler, 269

U

undeclare indicated ptype, 208
unregister patterns from the ToolTalk service, 208
unregister specified pattern from the ToolTalk service, 191

V

values with embedded nulls, 215
vtype, for ToolTalk objects, 290
vtypes, namespace for persistent objects, 293

W

warning identifiers, allocation, 277
write spec to ToolTalk database, 243
writing spec, first time, 243