



**SMASER**  
Aktiengesellschaft

---

Smart IT-Service Foundry

# TRIPsystem

## Change History

Version 7  
UNIX and Windows



## End User License Agreement

All rights to this software, its documentation and logotypes of the TRIP product family and software (altogether "Software") supplied by Smaser AG (Smaser) are exclusively owned by Smaser.

The transfer of this Software, solutions or parts thereof requires the prior written agreement of Smaser. Furthermore, the customer has the right to use licensed Software and / or process solutions supplied by Smaser to the extent specified in his contract with Smaser.

The free-to-use non-commercial version doesn't require a prior written agreement with Smaser but such customers, organizations and/or third parties agree by using the software and / or solution of Smaser to be strongly obliged to keep all rights to this software, documentation and logotypes of the TRIP product family absolutely unfringed and protected.



## Table of Contents

<b>About this Document .....</b>	<b>15</b>
<b>New functionality in v7.2-7 .....</b>	<b>16</b>
<b>New functionality in v7.2-6 .....</b>	<b>17</b>
<b>New functionality in v7.2-5 .....</b>	<b>18</b>
<b>New functionality in v7.2-4 .....</b>	<b>19</b>
<b>New functionality in v7.2-3 .....</b>	<b>20</b>
TRIP-5205: New settings for script and OS execution from Classic.....	20
TRIP-5188: Use more than 200 records / intervals with SHOW .....	20
<b>New functionality in v7.2-1 .....</b>	<b>21</b>
New functionality for all platforms .....	21
TRIP-5167: Tool for analysis of database file names and paths .....	21
TRIP-5130: Option to execute procedures of other users .....	21
TRIP-5129: Baseline values for facets in XPI .....	21
TRIP-5128: Name of database / cluster for a particular search .....	21
<b>New functionality in v7.2-0 .....</b>	<b>22</b>
New functionality for all platforms .....	22
TRIP-5111: Save part of search history as procedure in XPI .....	22
TRIP-5110: Enhanced database design info from clusters in XPI .....	22
TRIP-5005: New license format .....	22
TRIP-5002: Removal of the limit on open databases.....	22
TRIP-5001: Performance Improvements for Clustered DISPLAY .....	23
TRIP-5000: Performance Improvements for Clustered Search .....	23
<b>New functionality in v7.1-2 .....</b>	<b>24</b>
New functionality for all platforms .....	24
TRIP-959 – Renaming TRIP libraries.....	24
<b>New functionality in v7.1-1 .....</b>	<b>25</b>
New functionality for all platforms .....	25
SYS-1134 – Improved checking of CPU locked TRIP license .....	25
<b>New functionality in v7.1-0 .....</b>	<b>26</b>
New functionality for all platforms .....	26



SYS-990 - Graph Database .....	26
SYS-1008 - Unicode Conversion with Packit .....	26
SYS-1077 - Index Structure Improvements .....	26
<b>New functionality in v7.0-4 .....</b>	<b>27</b>
New functionality for all platforms .....	27
SYS-1106 - Server-side record copy method for XPI .....	27
<b>New functionality in v7.0-3 .....</b>	<b>28</b>
New functionality for all platforms .....	28
SYS-1068 - Record locking via XPI.....	28
New functionality for Windows platforms only .....	28
SYS-1091 - TRIP_CODEPAGE .....	28
<b>New functionality in v7.0-2 .....</b>	<b>29</b>
New functionality for all platforms .....	29
SYS-1029 - Added better "teaser" support with TdbGetFocus().....	29
SYS-1041 - Database audit logs without line planning of CCL commands .....	29
SYS-1043 - Optional logging for tripnetd .....	29
New functionality for Windows platforms only .....	29
SYS-1046 - Anti-virus programs removes the TRIPclassic shortcut.....	29
<b>New functionality in v7.0-1 .....</b>	<b>30</b>
New functionality for all platforms .....	30
SYS-1026 – New KVP definition to enable whole phrase search of key .....	30
SYS-1027 - Get db list from TdbShowControl() without accessing BAF .....	30
SYS-1031 - Allow limited database access info for current non-FM user.....	30
New functionality for Windows platforms only .....	30
SYS-1028 - Detect Windows 8 and Server 2012 in gethw .....	30
<b>New functionality in v7.0-0 .....</b>	<b>31</b>
New functionality for all platforms .....	31
SYS-450 – Raised limit on number of search sets.....	31
SYS-541 – Time stamps in TRIP to be stored as UTC not as local time .....	31
SYS-744 - Mode added to TdbSessionInfo() to check for active session.....	31
SYS-937 - Support for encrypted communications .....	31
SYS-971 - Automatically assigned logical name TDBS_HOME .....	31
SYS-972 - Changed name and location of configuration file .....	32



SYS-973 - Mechanism for working with several term lists in parallel.....	32
SYS-979 - XPI support for facets .....	32
SYS-984 - Retrieve a single control object for a database via XPI.....	32
SYS-992 - SYSTEM to see all CONTROL db information without indexing .....	32
SYS-994 - Enable web style search for the Find command .....	32
SYS-995 - Command line arguments for utility programs.....	32
SYS-997 - Synchronous indexing .....	32
SYS-998 - New term hit highlight option .....	33
SYS-999 - Event logging .....	33
SYS-1000 - Changed clean-up of old records after indexing.....	33
SYS-1015 - Printing an empty result will optionally create an empty file .....	33
SYS-1019 - ExtractFromStored option added to XPI.....	33
New functionality for Windows platforms only .....	34
SYS-976 - Enable special keypad functions in TRIPclassic .....	34
<b>Problems fixed in v7.2-7 .....</b>	<b>35</b>
Fixes for problems on all platforms .....	35
TRIP-5524: Using <dateform> with <curdate> in output formats.....	35
TRIP-5513: Sorting records might return an incorrect error message .....	35
TRIP-5492: Printed TFORM file might get incorrect character set .....	35
TRIP-5469: Risk for crash when executing searches with long CCL orders .....	35
TRIP-5447: Passwords with national characters .....	35
TRIP-5441: DISPLAY memory leak when used in clusters .....	35
TRIP-5364: AND between NUMBER, TIME and DATE may yield incorrect results .....	35
Fixes for problems on Unix platforms only.....	36
TRIP-5455: Console mode tripnetd still turns into daemon .....	36
<b>Problems fixed in v7.2-6 .....</b>	<b>37</b>
Fixes for problems on all platforms .....	37
TRIP-5441: DISPLAY memory leak when used in clusters .....	37
TRIP-5410: Referencing many search orders in CCL would cause crash.....	37
TRIP-5372: Crash when using databases created or indexed with TRIP 8.1 .....	37
TRIP-5365: Incomplete feature set assigned for some licenses.....	38
TRIP-5364: Incorrect results from AND between NUMBER, TIME and DATE .....	38
TRIP-5359: Invalid result when listing cluster members .....	38
TRIP-5337: Crash when starting session from TRIPjtk or TRIPclient.....	38



TRIP-5312: Using INI files may cause tbserver to crash .....	39
TRIP-5308: High CPU consumption with clustered search/display .....	39
TRIP-5307: Crash when closing database.....	39
TRIP-5306: Crash when searching by TSTAMP in a cluster .....	39
TRIP-5305: Crash when opening a cyclical database cluster.....	39
TRIP-5303: XPI memory leaks retrieving data and listing databases.....	39
TRIP-5302: Risk for crash when retrieving data via the XPI .....	39
TRIP-5301: Commands longer than 2 Kb may result in crash.....	39
TRIP-5298: Incorrect DISPLAY sorting in mixed character set clusters .....	39
TRIP-5296: Classic may self-terminate shortly after started.....	40
TRIP-5284: Imported procedures may fail with "illegal character" error .....	40
TRIP-5270: Mandatory field value checks may fail .....	40
Fixes for problems on Unix platforms only .....	40
TRIP-5389: XPI sessions may fail due to missing OS dependencies.....	40
TRIP-5328: tripd may stop executing batch jobs .....	40
<b>Problems fixed in v7.2-5 .....</b>	<b>41</b>
Fixes for problems on all platforms .....	41
TRIP-5275: Global deletes not honoring SUPERMAN setting.....	41
TRIP-5274: TRIPview-C not recognized in license .....	41
TRIP-5273: TdbLoadStatus may keep database status .....	41
TRIP-5269: Reopening a single DB cluster may revert to DB .....	41
TRIP-5268: TdbLoadStatus may deactivate the wrong databases.....	41
TRIP-5251: Indexing a DB with a lot of term occurrences .....	42
TRIP-5250: Indexing a DB with a lot of phrase occurrences .....	42
TRIP-5245: Risk for crash in DISPLAY with clusters .....	42
<b>Problems fixed in v7.2-4 .....</b>	<b>43</b>
Fixes for problems on all platforms .....	43
TRIP-5243: Memory leak in comforter .....	43
TRIP-5236: Incorrect character set for Output format headers/trailers.....	43
TRIP-5232: Retrieval of sorted search results may fail.....	43
TRIP-5224: VIF file reorganization not working for large databases .....	43
TRIP-5223: Crash opening a cluster if max DB limit is exceeded .....	43
TRIP-5221: Incorrect log file name for "PRINT NO HOLD" .....	43
TRIP-5220: Temporary files not removed for failed PRINT or UPDATE job .....	43



TRIP-5217: Invalid charset for focused non-TEXT fields via XPI .....	43
TRIP-5206: Incorrect character set in printed TFORM .....	44
TRIP-5034: Premature termination of long searches .....	44
TRIP-5170: Errors from focus via XPI against part record databases .....	44
Fixes for problems on Unix platforms only .....	44
TRIP-5229: Resource leak in tripd on Linux .....	44
TRIP-5211: Intermittent crashes in tripd .....	44
Fixes for problems on Windows platforms only .....	45
TRIP-5218: Failure starting an encrypted session .....	45
<b>Problems fixed in v7.2-3 .....</b>	<b>46</b>
Fixes for problems on all platforms .....	46
TRIP-5207: The showlic tool may crash showing active license info.....	46
TRIP-5204: Incorrect accounting information when printing data .....	46
TRIP-5199: Classic term lists incorrect if database cluster was opened .....	46
TRIP-5197: Classic linked field display lists may cause crash .....	46
TRIP-5197: Clusters not detected in chkdbfiles .....	46
TRIP-5196: Search check fails in chkdbfiles for some databases .....	47
TRIP-5195: File paths not always detected correctly in chkdbfiles .....	47
TRIP-5193: Designs imported via TRIPmanager not marked as UTF-8.....	47
TRIP-5189: Searching in multiple fields fails.....	47
<b>Problems fixed in v7.2-2 .....</b>	<b>48</b>
Fixes for problems on all platforms .....	48
TRIP-5179: Merged subfields for layout retained PHRASE fields .....	48
TRIP-5178: Garbage output for XPI hit focus on some TEXT fields.....	48
TRIP-5177: Opening a new thesaurus may fail .....	48
TRIP-5173: Hyphenated words yields "No hits" with FUZZ .....	48
TRIP-5172: Classification searches may crash .....	48
TRIP-5171: Terms not retrievable from some term sets .....	48
TRIP-5170: Focus via XPI not working with deleted part records.....	48
Fixes for problems on Unix platforms only .....	49
TRIP-5176: Endian violation for Solaris licenses .....	49
<b>Problems fixed in v7.2-1 .....</b>	<b>50</b>
Fixes for problems on all platforms .....	50
TRIP-5165: Wrong result from exact match search inside parenthesis.....	50



TRIP-5163: Missing highlights in exact match tuple search .....	50
TRIP-5162: Risk for crash when retrieving terms from a termset .....	50
TRIP-5161: Duplicate termset registration .....	50
TRIP-5157: Starting with default license may sometimes fail .....	50
TRIP-5156: Saving procedures not possible for long group/user names .....	50
TRIP-5155: Reindex may keep index data for emptied database .....	51
TRIP-5154: Facets and term lists may become inaccessible .....	51
TRIP-5153: Write scopes not working for empty sets .....	51
TRIP-5151: SAVE may sometimes omit the BASE command.....	51
TRIP-5150: Incorrect results when searching for negative integers .....	51
TRIP-5149: MODCON may fail with more than 50 databases in CONTROL .....	51
TRIP-5146: Risk for crash in update of db with date restrictions .....	51
TRIP-5145: Incomplete history replace via XPI .....	51
TRIP-5123: Incorrect highlighting for some time values .....	52
TRIP-5040: FUZZ abbreviated operators not always recognized.....	52
Fixes for problems on Unix platforms only.....	52
TRIP-5166: Possible garbage character on Classic login screen.....	52
TRIP-5137: Installer script error on Debian 9.....	52
Fixes for problems on Windows platforms only .....	52
TRIP-5169: Windows start menu shortcuts break best practice .....	52
<b>Problems fixed in v7.2-0 .....</b>	<b>53</b>
Fixes for problems on all platforms .....	53
TRIP-5117: Display orders may sometimes result in an empty term.....	53
TRIP-5100: Global Tuple Delete Might Delete Wrong Subfields .....	53
TRIP-5089: Risk for Crash with Restricted-Write CONTROL .....	53
TRIP-5088: Risk for Crash in Numeric Display Command .....	53
TRIP-5087: Incorrect Message from Indexing Failure .....	53
TRIP-5086: Risk for Crash During Index Reorganization .....	53
TRIP-5082: Incorrect Message when Cancelling Search .....	53
TRIP-5081: Use of Stemming May Result in Fewer Records Found.....	53
TRIP-5080: Upgoing Loop in Polyhierarchical Thesaurus not Detected .....	54
TRIP-5070: Crash in TdbGetWindowHits .....	54
TRIP-5063: Crash During SQL Aggregate Select.....	54
TRIP-5053: Risk for Crash when Canceling a Search .....	54





TRIP-5051: FUZZ Returns Incorrect Number of Hits for an INT Field .....	54
TRIP-5044: Risk for Crash When Sorting on Text Fields .....	54
TRIP-5043: Crash When Using Unique Integer Fields .....	54
TRIP-5042: Long Values in Unique Phrase Fields Caused Crash .....	54
TRIP-5038: Invalid date format for date field restrictions .....	54
TRIP-5037: Truncated Search May Miss Terms .....	55
TRIP-5036: TFORM Load Fails for Unique Fields .....	55
TRIP-5034: TBServer Process May Hang .....	55
TRIP-5032: Risk for Crash When Indexing DB with Unique Fields .....	55
TRIP-5030: Term Count Overflow in Index Log .....	55
TRIP-5023: Incorrect Information About Job Result .....	55
TRIP-5022: Crash When Using Large Term Interval with Find .....	55
TRIP-5020: Unterminated Quoted Phrase Caused Syntax Error .....	55
TRIP-5018: TdbGetRecordInSearchRis Crash .....	55
TRIP-5016: Crash in LIST and CLOSE Commands .....	55
Fixes for problems on Unix platforms only .....	56
TRIP-5118: Unread mails from TRIP causes large mailboxes .....	56
TRIP-5113: Database creation may fail in a VMware virtual machine .....	56
TRIP-5026: Log, SIF and scratch directories not properly migrated .....	56
Fixes for problems on Windows platforms only .....	56
TRIP-5122: Spaces in install path interferes with batch jobs .....	56
TRIP-5119: Risk for crash in Classic .....	57
TRIP-5065: Invalid Error from Global Update on Windows .....	57
TRIP-5064: Risk for Crash During SORT on Windows .....	57
<b>Problems fixed in v7.1-3 .....</b>	<b>58</b>
Fixes for problems on all platforms .....	58
TRIP-1481 – XPI: Sorting larger SearchSet with comforter hangs .....	58
TRIP-406 – XPI: user AccessRights request work properly only for FM users .....	58
TRIP-1572 Incremental indexing stops working .....	58
TRIP-176 FUZZ: missing operand .....	58
TRIP-221 Deleting 1st record from db-search set does not indicate flag 7 .....	58
TRIP-444 Showing timestamp sorted records from a non-indexed database causes a crash ..	58
TRIP-584 XPI: Incorrect RID returned when fetching deleted record from the search set .....	58
TRIP-746 FUZZ incorrectly handles indirect AND operation .....	58



TRIP-787 Disabled to login when logged in already .....	58
TRIP-802 Error 19618 message changed to "Phrase field restriction violation." .....	58
TRIP-1600 Fetching record(s) from bigger sorted SearchSet is slow .....	59
TRIP-2018 Transferring long strings via XPI takes extremely long .....	59
TRIP-1910 XPI: No hits exception when using TdbSearchFacet .....	59
TRIP-667 Wrong date highlighting .....	59
<b>Problems fixed in v7.1-2:1 .....</b>	<b>60</b>
Fixes for problems on all platforms .....	60
TRIP-488 – Incorrect time stamp in database log file .....	60
TRIP-1268 – TRIPclassic Global Update runs into Segmentation fault .....	60
TRIP-1545 – System: sort crash .....	60
TRIP-1570 – Showing timestamp sorted records from a non-indexed database causes a crash .....	60
TRIP-1571 – Sort on text field in UTF does not work .....	60
Fixes for problems on Windows platforms only .....	61
TRIP-478 – TRIP might crash on 64-bits Windows when searching .....	61
<b>Problems fixed in v7.1-2 .....</b>	<b>62</b>
Fixes for problems on all platforms .....	62
TRIP-1139 – Illegal Order Part: DEFINE THESaurus=PH:Thesali.PH:book .....	62
TRIP-1000 – Different result for truncation mask search .....	62
TRIP-894 – Login - NG is not a valid language code .....	62
TRIP-893 – Search with empty result sets result into crash .....	62
TRIP-868 – The same query executed twice makes different results .....	62
<b>Problems fixed in v7.1-1:3 .....</b>	<b>63</b>
Fixes for problems on all platforms .....	63
TRIP-499 – Problem to manage database design in TRIPclassic .....	63
TRIP-547 Show items from linked database causes segmentation fault .....	63
TRIP-566 Term list of display incorrect .....	63
TRIP-588 DISPLAY command cannot be used for numeric only databases .....	63
The values cannot be displayed in a term list, if database has no TEXT or PHRASE fields .....	63
TRIP-635 Stop attempt to login several times in the same session .....	63
TRIP-673 Problem to install TRIPsystem on Chinese Windows .....	63
<b>Problems fixed in v7.1-1:2 .....</b>	<b>64</b>
Fixes for problems on all platforms .....	64



TRIP-167 - Unable to start/work with Manager when using new locking mechanism on "My computer" .....	64
TRIP-261 - Backport fix with hash initialization to 7.1 (related to new locking) .....	64
TRIP-248 (SYS-1127) - Term lists of numeric fields (DATE/TIME/NUMBER) in database clusters show incorrect record hits .....	64
TRIP-268 - Unable to import XML database definitions with Chinese characters on Chinese Linux .....	64
TRIP-293 - A search using several fuzz() combined with OR and AND might cause a crash ..	65
TRIP-304 - Using TdbPutLine()/TdbInsertItem() for Part Names incorrectly removes all existing ones .....	65
TRIP-305 - Displaying thesaurus terms using the TRIPapi might need an open database .....	65
TRIP-449 - User listing returns also groups .....	65
<b>Problems fixed in v7.1-1:1 .....</b>	<b>66</b>
Fixes for problems on all platforms .....	66
SYS-1145 - A search query containing empty parenthesis might cause a loop .....	66
SYS-1139 (TRIP-238) - Sorting the result from a Duplicate() search function causes a crash ..	66
<b>Problems fixed in v7.0-4 .....</b>	<b>67</b>
Fixes for problems on all platforms .....	67
SYS-1105 - The output format filter <entitify> might cause loss of data .....	67
SYS-1107 - Replacing a value on a copy retains the old one .....	67
SYS-1108 - Crash when searching duplicates in misspelled field .....	67
SYS-1109 - Field attributes Unique and Immediate Index caused crash .....	67
SYS-1110 - Problem loading TFO file with STRING fields into Unicode db .....	67
SYS-1115 - Synchronously indexing same record repeatedly corrupts index .....	67
SYS-1116 - Layout retained text returned with extra space between sentences .....	67
SYS-1117 - Incorrect error message on database OS write protection .....	67
SYS-1121 - Opening a large database cluster may hang or cause crash .....	68
SYS-1122 - TFORM load with erroneous entries report success .....	68
SYS-1124 - Creating empty part records not possible using TRIPtoolkit .....	68
SYS-1126 - Exact matching of several terms with Boolean operators gives incorrect result ....	68
SYS-1127 - Term lists of numeric fields (DATE/TIME/NUMBER) in database clusters show incorrect record hits .....	68
SYS-1128 - Incorrect hit highlighting with TRIPjxp/nxp .....	68
SYS-1129 - Unable to create a classification database with 16 characters in name .....	68
Fixes for problems on Unix platforms only .....	69
SYS-1119 - Installer fails on new install after setdpwd call .....	69



Fixes for problems on Windows platforms only .....	69
SYS-1113 - Repair install fails with error message.....	69
SYS-1114 - Incomplete uninstallation .....	69
SYS-1123 – Installer not setting conflator symbols.....	69
<b>Problems fixed in v7.0-3 .....</b>	<b>70</b>
Fixes for problems on all platforms .....	70
SYS-183 - TdbGetRecordBuffer will loop if cursor specifies only 1 field .....	70
SYS-253 - STATUS CLUSTER command gave inconsistent results .....	70
SYS-1053 - Word restricted term list of phrase fields sometimes incorrect.....	70
SYS-1058 - The CCL Fuzz() function might miss terms with low relevance .....	70
SYS-1059 - Ambiguous return code from function TdbDeleteBaseDef .....	70
SYS-1060 - Wrong return code for TdbDeleteBaseDef in documentation .....	70
SYS-1065 - Import of db design with searchable parenthesis didn't work.....	70
SYS-1066 - Could not mix calls to TdbDaoOrder() and TdbExecuteCcl().....	71
SYS-1069 - A Unicode session returned "No hits" for phrase searches.....	71
SYS-1070 - Loading TFORM variable length data might cause garbled txt .....	71
SYS-1071 - Incorrect sentence detection for Chinese data.....	71
SYS-1081 - Function TdbGetBaseDef erroneously returned 1.....	71
SYS-1082 - Creating empty part records not possible using TRIPtoolkit .....	71
SYS-1083 - Single record indexing did not always work correctly.....	71
SYS-1084 - Printing from a non-Unicode database might cause a crash.....	71
SYS-1085 - Data entry might cause the CCL parser to stop working.....	72
SYS-1086 - A PRINT command reported success instead of failure.....	72
SYS-1087 - TRIP looped with a search query like "1..3" AND jack .....	72
SYS-1088 – The operator AND.S didn't work across subfields/sentences.....	72
SYS-1100 – XPI record locking may not unwind lock status properly .....	72
SYS-1103 – Database read scopes causes incorrect results or a crash.....	73
Fixes for problems on Unix platforms only.....	73
SYS-1072 - The SIF file name path was limited to 64 bytes.....	73
Fixes for problems on Windows platforms only .....	73
SYS-1089 - LDAP SSL Certificate Verification on 64-bit Windows.....	73
<b>Problems fixed in v7.0-2 .....</b>	<b>74</b>
Fixes for problems on all platforms .....	74
SYS-898 - Very long output format headers might get partly duplicated .....	74



SYS-1032 - Initialization of Unicode normalizer not always done properly.....	74
SYS-1033 - A search with large OR expr AND a small set was very slow .....	74
SYS-1034 - queryrcs -p didn't show values redefined by environment .....	74
SYS-1035 - Incorrect paragraph/sentence detection for English text in .....	74
SYS-1037 - Overriding TRIP config with \$HOME/.TRIPrcs did not work .....	74
SYS-1038 - Corrupt scope fields in database access info for owners .....	75
SYS-1039 - Deleting Referential Integrity Foreign Key gave error msg .....	75
SYS-1040 - Redirecting output from TRACER to a file hanged.....	75
SYS-1042 - XPI update failed when no write access to record name field.....	75
SYS-1045 - Add-on TRIP licenses were not usable .....	75
SYS-1047 - Db design import with PATH= gave incorrect filenames .....	75
SYS-1048 - Indirect search in Chinese db might return incorrect hits .....	75
SYS-1049 - The max limit for TDBS_DELETE_MAX is only 255 .....	75
SYS-1055 - Searching for tstamp values most often resulted in 'No hits' .....	75
SYS-1056 - Timestamp parameter of the Load utility resulted in a crash .....	76
SYS-1057 - TBS_HOSTINI not the same on Unix and Windows .....	76
SYS-1058 - Fuzz() function might miss some terms with lower relevance .....	76
Fixes for problems on Unix platforms only.....	76
SYS-1012 - Error starting load or load/index jobs from CCL or TRIPapi .....	76
SYS-1036 - stripping utility did not work with non-default port on UNIX.....	76
SYS-1044 - UNIX process started by tripnetd had non-standard name .....	76
<b>Problems fixed in v7.0-1 .....</b>	<b>77</b>
Fixes for problems on all platforms .....	77
SYS-1021 - Display lists with transaction sets might show garbage .....	77
SYS-1022 - The "unique" property of a phrase field design had no effect.....	77
SYS-1023 - Manager list using TRIPmgr/jxp/nxp might not show SYSTEM .....	77
SYS-1030 - Test for unindexed records incorrect in some TRIP utilities .....	77
Fixes for problems on Unix platforms only.....	77
SYS-1024 - Error when inserting an empty string field via XPI on AIX.....	77
Fixes for problems on Windows platforms only .....	77
SYS-1025 - Saving a TRIP session to a file just created an empty file .....	77
<b>Problems fixed in v7.0-0 .....</b>	<b>78</b>
Fixes for problems on all platforms .....	78
SYS-983 - Invalid database location names reported by XPI .....	78



SYS-991 - An SDI scope definition might include an already seen record .....	78
SYS-993 - Using immediate indexing of field content might cause a crash .....	78
SYS-996 - Incorrect highlight of non-Unicode dbs in Unicode session.....	78
SYS-1003 - Part records not fully working with STRING streaming in XPI.....	78
SYS-1005 - TRIPsql crashed when an accounting file was in use .....	78
SYS-1006 – No data conversion for "Global copy" of recs between dbs.....	78
SYS-1007 - Copying search forms caused a crash .....	79
SYS-1008 – Use Packit to Convert a db from one char. set to another.....	79
SYS-1009 - Default max for Global Delete set to 100 records .....	79
SYS-1010 - Setting the license via TRIPmgr might return an error .....	79
SYS-1011 - TRIPclassic data entry incorrect when deleting part records .....	79
SYS-1012 - Error starting load or load/index jobs from CCL or TRIPapi .....	80
SYS-1014 - Specifying a full filename in TDBS_SIF might cause a crash .....	80
SYS-1016 - Text extraction in update via XPI may fail silently .....	80
SYS-1017 - Appending part records in update via XPI may cause crash.....	80
SYS-1018 - Text extraction update to named part records via XPI fails.....	80
SYS-1020 - Text extraction update via the XPI may corrupt stored data .....	80
Fixes for problems on Unix platforms only.....	81
SYS-1002 - Data entry and TFORM load might cause a crash on Unix.....	81
SYS-1004 – A PRINT NOW done from a CCL window crashed TRIPmgr .....	81



## About this Document

This document contains the change history for v7 of TRIPsystem and corresponding versions of TRIPserver.

Please refer to the Release Notes for information about supported platforms and version specific information.



## **New functionality in v7.2-7**

No new functionality has been added in version 7.2-7.





## **New functionality in v7.2-6**

No new functionality has been added in version 7.2-6.



## **New functionality in v7.2-5**

No new functionality has been added in version 7.2-5.



## **New functionality in v7.2-4**

No new functionality has been added in version 7.2-4.



## New functionality in v7.2-3

### TRIP-5205: New settings for script and OS execution from Classic

There previously only existed one environment variable, TDBS\_SPAWN (default Y), defined in the privileged section of the configuration file tdb.conf, that could be used to enable/disable both the possibility to execute scripts in CCL and to enter the O/S level from TRIPclassic.

Two new environment variables are introduced:

- TDBS\_EXEC\_SCRIPT=Y/N, default value Y
- TRIP\_ENTER\_OS=Y/N, default value Y

TDBS\_SPAWN is the main switch, setting it to N disables the setting of the new ones.

### TRIP-5188: Use more than 200 records / intervals with SHOW

(Changed in patch 7.2-2:1)

The SHOW command to generate output format reports takes an optional list of records and record intervals, specifying the ordinal numbers of records to display from a search set. The maximum length of this list has prior to this release been 200 items (where an item would be a record number or an interval). This limit has now been removed.



## New functionality in v7.2-1

### New functionality for all platforms

#### TRIP-5167: Tool for analysis of database file names and paths

A new command line tool `chkdbfiles` is available. When called with a file manager user, it checks the owned database name and paths as specified in the database designs and reports any errors found. If the SUPERMAN logical name is set and the program is called with the SYSTEM user, an analysis of all databases is performed.

Running this tool is recommended if TRIP is migrated from one machine to another. The verification that all database paths are correctly set can help eliminate issues with non-existent paths and missing logical names.

Refer to the document “TRIP7 New Features” for more information on this tool.

#### TRIP-5130: Option to execute procedures of other users

By defining the new symbol `TDBS_RO_USER_PROCEDURES` in the privileged section of the `tdbs.conf` file, private user procedures will be executable by other users. Other users will also be able to read procedure properties such as the comment when such information is requested via the API. Procedure lists such as can be seen in TRIPclassic and TRIPmanager are not affected by this and therefore behave like before.

This does not apply to procedures owned by SYSTEM. Such procedures remain strictly private.

#### TRIP-5129: Baseline values for facets in XPI

The XPI facet functionality as exposed by TRIPjxp and TRIPnpx has been extended with the option to define a baseline. This concept enables the recall of a previous, initial set of facet values so that a new facet request can 1) include the previous counts as a comparison, and 2) add values from the baseline to the new result if the new result is smaller than the requested range.

This makes it more convenient to create a facet navigation user interface with facets whose values can remain even if the current search may not include matches for all facet values.

Refer to the documentation for TRIPnpx and TRIPjxp version 7.2-1 or later for more detailed information.

#### TRIP-5128: Name of database / cluster for a particular search

The name of the database or cluster that was used to produce a search can now be obtained via the `TdbSessionInfo` function using the `SESSIONINFO_DB_IN_SEARCH` mode and supplying the search number in the integer pointer in/out parameter.

This information is also available to XPI clients via TRIPjxp and TRIPnpx version 7.2-1 and later via the `TdbHistoryDetail` and `TdbSearchSet` classes.



## New functionality in v7.2-0

### New functionality for all platforms

#### TRIP-5111: Save part of search history as procedure in XPI

The XPI protocol has been extended to support saving part of a search history as a procedure, like with the CCL command "SAVE".

#### TRIP-5110: Enhanced database design info from clusters in XPI

The XPI protocol has been enhanced to provide additional information on the design of the databases in a cluster:

- Retrieve a list of all databases in a cluster, with any nested cluster resolved into their constituent databases.
- Bulk retrieval of the designs for all databases in a cluster.
- Retrieve a list of fields common to all databases in a cluster. Fields are considered common if they share name, type and head/part location.

#### TRIP-5005: New license format

The format of the TRIP license has been renewed. This affects the Unix/Linux installation procedure, as well as and the usage of the gethw and setlock tools on all platforms. Refer to the TRIPsystem\_Installation\_Guide\_Unix.pdf and TRIP\_license\_key.pdf documents for more information.

#### TRIP-5002: Removal of the limit on open databases

The limit on the maximum number of open databases has been removed. It is no longer set to a hard limit of 250. The new limit is variable and depends mainly on two factors: what the license allows for, and what the operating system is capable of handling.

There are two feature levels in the license that govern the use of open databases: the number of open databases in total, and the max size of database clusters. Use the new showlic tool to inspect what your license allows for.

To use a large number of databases, the operating system may have to be configured to allow for additional file descriptors per process. On UNIX and Linux systems, this limit is fairly low by default, and may not be sufficient even for "only" 250 open databases. To calculate the needed number of open file descriptors allowed per process:

- If transaction log files **are not** used (the default): multiply the desired max number of open databases and thesauri by 3 and add 16.
- If transaction log files **are** used: multiply the desired max number of open databases and thesauri by 4 and add 16.

In order to make room for larger data sets, two standard kernel window formats have been adjusted to allow for higher record counts; the history window and the display result window. The last column is now two columns further to the right for the history window, and three columns further to the right for the display result window. **Applications that parse the contents of these windows may have to be adjusted.**

**TRIP-5001: Performance Improvements for Clustered DISPLAY**

When using DISPLAY to generate term lists from a database cluster, TRIP will now execute the command in parallel against the individual databases instead of serially like it was done in older versions. The number of worker threads is 16 by default, but can be customized in the tdbb.conf configuration file using the new TDBS\_MAX\_THREADS symbol.

**TRIP-5000: Performance Improvements for Clustered Search**

When searching in a database cluster, TRIP will now perform the search in parallel against the individual databases instead of serially like it was done in older versions. The number of worker threads is 16 by default, but can be customized in the tdbb.conf configuration file using the new TDBS\_MAX\_THREADS symbol.



## **New functionality in v7.1-2**

### **New functionality for all platforms**

#### **TRIP-959 – Renaming TRIP libraries**

Renaming TRIP libraries. New TRIP Manager was released. Previous and current versions of TRIP Manager are incompatible. For local connection JXP and NXP must be updated.





## **New functionality in v7.1-1**

### **New functionality for all platforms**

#### **SYS-1134 – Improved checking of CPU locked TRIP license**

TRIP uses licenses with and without CPU lock. For CPU locked licenses TRIP collects more information. New CPU licenses contain information about operation system and hardware. Old licenses codes are valid till expiration.



## New functionality in v7.1-0

### New functionality for all platforms

#### **SYS-990 - Graph Database**

A new database type for graphs has been introduced. Graph databases, like XML databases, utilize a specific kernel-controlled database design. Graph databases can be created via TRIPmanager and programmatically via version 3.1 of TRIPjxp and TRIPnpx.

APIs for graph database search and manipulation are available in version 3.1 of TRIPnpx and TRIPjxp, and in TRIPsystem via the TRIPtoolkit server-side API for the C programming language.

For more information please refer to the document “*TRIP as a Graph Database – Tutorial*” (GraphDatabaseTutorial.pdf), provided with the TRIPsystem documentation set.

**Note!** Graph support is EXPERIMENTAL in version 7.1 of TRIPsystem and version 3.1 of TRIPjxp and TRIPnpx. Its use is encouraged and Tieto would like feedback on it. This feedback will help determine the future direction of the development of graph database support in TRIP.

#### **SYS-1008 - Unicode Conversion with Packit**

The Packit program can now be used to convert a non-Unicode database to Unicode as part of its operations. For detailed instructions, please refer to the Packit manual (Packit.pdf), provided with the documentation set for TRIPsystem.

#### **SYS-1077 - Index Structure Improvements**

Performance enhancements have been made to the indexer for separate indexed fields (index attribute “*create field-specific index*” in TRIPmanager). This affects DISPLAY orders on such fields, and makes it more convenient to do on-the-fly generation of facets also in larger databases.

In order for this change to take effect on a database, it must be first be re-indexed.



## New functionality in v7.0-4

### New functionality for all platforms

#### **SYS-1106 - Server-side record copy method for XPI**

XPI based record copying currently has traditionally required all values to be fetched to the client, whereupon they are all sent back with record name and/or database name changed. This is an inefficient approach, and is also unable to properly handle STRING field values since TRIPsystem version 6.2-9:7.

A fully server-side record copying routine has been added to the XPI library. Use of this routine is supported via the new Copy method in the TdbRecord class, available in TRIPnpx version 3.0-7 or later and in TRIPjxp version 3.0-8 or later.

It is strongly recommended that all existing record copying routines in TRIPjxp and TRIPnpx applications are modified to use the new Copy method if possible. This is because it fully supports STRING fields, values of which may silently be omitted from the copy. In addition, this new method is better from a performance perspective as well when compared to the traditional way of copying records in TRIPjxp and TRIPnpx.



## New functionality in v7.0-3

### New functionality for all platforms

#### **SYS-1068 - Record locking via XPI**

Support (pessimistic) record locking via the XPI. This kind of locking is available in TRIPclient and TRIPjtk and is now also available in TRIPjxp and TRIPnxp via XPI.

### New functionality for Windows platforms only

#### **SYS-1091 - TRIP\_CODEPAGE**

(Changed in 7.0-3:2)

The specification of code page has been removed from the start menu shortcut to TRIPclassic. The Windows code page to use with TRIPclassic is now defined in the tdbb.conf file by the TRIP\_CODEPAGE variable.

The TRIP\_CODEPAGE variable should not be set for Chinese installations. A valid value for any other installation language is a code page that is available on the local machine. TRIPclassic supports pseudo graphics for code page nr 437, 850, 858 and 865. The Euro currency symbol is supported with code page 850 and 1252.

The TRIP\_CODEPAGE variable with value 858 is automatically written to the tdbb.conf during installation if the language of the operating system is other than Chinese.



## New functionality in v7.0-2

### New functionality for all platforms

#### **SYS-1029 - Added better "teaser" support with TdbGetFocus()**

Using a negative number for the argument "size guide" now gives the following result:

1. The returned string will exceed "size guide" with max 5 chars.
2. If a sentence with hits is longer than "size guide", fragments containing the hits will be returned.
3. If there are no hits in the specified field, the first "size guide" characters of the field will be returned.

#### **SYS-1041 - Database audit logs without line planning of CCL commands**

The database audit log will now contain the CCL commands FIND, DISPLAY and BASE without any line breaks at the 80th column

There will be no additional information on the command line output.

#### **SYS-1043 - Optional logging for tripnetd**

The tripnetd service/daemon always writes a log file "tripnetd.log" under the TDBS\_LOG directory. Make this behavior optional, and allow for the customization of name and path of the log file.

### New functionality for Windows platforms only

#### **SYS-1046 - Anti-virus programs removes the TRIPclassic shortcut**

Some anti-virus programs, e.g. F-Secure, removes the TRIPclassic shortcut on Windows. The reason for removal is probably that the shortcut target consists of two commands (set the code page and start TRIPclassic) and one of them is an executable file.

This problem is solved by adding a new command line argument, -cp, to TRIPclassic by which it is possible to specify the code page. In this way the shortcut Target will be simpler.

See the TRIP Installation Guide for Windows for the description of TRIPclassic shortcut settings.



## New functionality in v7.0-1

### New functionality for all platforms

#### **SYS-1026 – New KVP definition to enable whole phrase search of key**

New KVP definition and default setting to enable whole phrase search of key.

In order to search the key field as a complete phrase and not as a possible sub phrase the definition has been changed as follows:

```
def kvp=key1,value1 -> key1 is searched as a complete phrase (new default)
def kvp='key2',value2 -> key2 is searched as a complete phrase (use single quotation marks)
def kvp="key3",value3 -> key2 is searched as a complete phrase (use double quotation marks)
```

#### **SYS-1027 - Get db list from TdbShowControl() without accessing BAF**

New option to get a database list from TdbShowControl() without accessing BAF.

Use the new constant DATABASE\_LIST\_NOBAF with TdbShowControl() in order to get a database list without accessing the BAF files. This is useful if the BAF files are stored on other media than hard disks.

#### **SYS-1031 - Allow limited database access info for current non-FM user**

(Added in 7.0-1:1)

A non-filemanager user who has access to a database could previously via the XPI not enumerate fields in the database such that it would be possible to tell which fields are writable and which fields are read-only. The XPI functionality in TRIPsystem has been altered to allow this via the TdbDatabaseAccess class in TRIPnpx and TRIPjxp.

### New functionality for Windows platforms only

#### **SYS-1028 - Detect Windows 8 and Server 2012 in gethw**

Support added to the gethw tool for the detection of Windows 8 and Windows Server 2012.



## New functionality in v7.0-0

### New functionality for all platforms

#### **SYS-450 – Raised limit on number of search sets**

The previous limit on the maximum number of search sets, 255, has been raised to 65535. This will probably be raised to unlimited in a future release.

#### **SYS-541 – Time stamps in TRIP to be stored as UTC not as local time**

Time stamps in TRIP are now stored as UTC, not as local time.

UTC (Coordinated Universal Time) is the current primary time standard by which the world regulates clocks and time. For most purposes, UTC is synonymous with GMT.

The timestamp is stored as the number of seconds since the Epoch 00:00:00 UTC, January 1, 1970.

There are two issues that are addressed by this change:

- problems arising from DST (Daylight saving time)
- problems when showing and updating a database from different time zones

#### **SYS-744 - Mode added to TdbSessionInfo() to check for active session**

A mode SESSIONINFO\_SESSION\_STATUS has been added to the TdbSessionInfo() function. This checks if the session is active. The numeric output parameter can receive the following values:

- 0 - session is not started
- 1 - kernel is initialized, but user has not logged in
- 2 - session is active and user is logged in
- 3 - session is inactive, user has logged out

#### **SYS-937 - Support for encrypted communications**

The tserver now supports encrypted sessions from TRIPmanager, TRIPjxp and TRIPnxp. This feature is supported on all platforms except on Tru64.

Please refer to the documentation for TRIPmanager, TRIPjxp and TRIPnxp for information on how to establish encrypted sessions.

#### **SYS-971 - Automatically assigned logical name TDBS\_HOME**

The logical symbol TDBS\_HOME is automatically assigned to the fully qualified path to the installation directory. E.g.:

```
TDBS_HOME=/opt/trip/system/v700
```

This logical symbol can be used in the definition of the values of other logical symbols in the TRIP configuration file. E.g.:



```
TDBS_CTL=${TDBS_HOME}/sys
```

### **SYS-972 - Changed name and location of configuration file**

The configuration file for TRIPsystem has been renamed and moved from `/.TRIPrcs` (C:\TRIPrcs on Windows) to `${TDBS_HOME}/conf/tdbs.conf`. On Unix/Linux, this file is accessible via the path `/usr/local/trip/sys/conf/tdbs.conf`, where `/usr/local/trip/sys/conf` is a link to `${TDBS_HOME}/conf`.

NOTE: This change affects systems administration and installation procedures. Please refer to the Administration Guide and the TRIPsystem 7 Release Notes for more information on this topic.

### **SYS-973 - Mechanism for working with several term lists in parallel**

Add a mechanism to the TRIP kernel and the XPI library to allow applications to work with more than one term list in parallel, so that a DISPLAY-order does not destroy a term list generated by a previous DISPLAY-order.

### **SYS-979 - XPI support for facets**

The XPI library now provides TRIPnpx and TRIPjxp applications with added assistance for the generation of facets. Facet values can be retrieved based on 1) regular field-based term lists, 2) KVP term lists, 3) classification term lists, and 4) collection of search sets where each search set corresponds to a facet value.

### **SYS-984 - Retrieve a single control object for a database via XPI**

When retrieving a list of database control objects via the XPI (from TRIPnpx or TRIPjxp), it is now possible to specify the name of a database as input. This causes the XPI to return a single control object that corresponds to the database, cluster or thesaurus with that name.

### **SYS-992 - SYSTEM to see all CONTROL db information without indexing**

User SYSTEM to see all CONTROL database information without indexing.

### **SYS-994 - Enable web style search for the Find command**

Enable/disable web style search for the Find command using the Define command:

```
Define Find [=] [no] Fuzz
```

### **SYS-995 - Command line arguments for utility programs**

It is now possible to specify the parameters for the utility programs as argument on the command line. The argument syntax for a utility program is displayed when the special argument `--help` is specified.

See the release notes for TRIPsystem 7.0 for more details.

### **SYS-997 - Synchronous indexing**

TRIP now supports synchronous indexing of a single record or all records on the queue to be indexed.





Synchronous indexing of single records can be used via the TRIP API function TdbIndex, from the TdbRecord class in version 3.0 of TRIPjxp and TRIPnxp.

Synchronous indexing of multiple records can be used via the TdbDatabaseDesign class in version 3.0 of TRIPjxp and TRIPnxp.

See the release notes for TRIPsystem 7.0 for more details.

### **SYS-998 - New term hit highlight option**

Disabling hit information when searching whole field contents significantly decreases the size of the SIF file. This is not the default, it must be set when needed.

CCL command: Def Highlight=min

Can also be set in the TRIPrcs file with TDBS\_DISPLAY\_HIGHLIGHT=M

### **SYS-999 - Event logging**

An event logger library has been added to TRIPsystem. This is able to detect various events in TRIP sessions and log its findings to file.

See the release notes for TRIPsystem 7.0 for more details.

### **SYS-1000 - Changed clean-up of old records after indexing**

The utility baffre, used for removing old versions of records after indexing, is not used with Trip7. This is now handled within the index program itself.

### **SYS-1015 - Printing an empty result will optionally create an empty file**

(Added in 7.0-0:4)

Similar to printing TFORM files, it is now possible to get an empty file when printing an empty result set. In order to control the result of printing empty result sets a new value can be set in the tdb.conf file (or defined as an environment variable):

TDBS\_PRINT\_EMPTY\_FILE=Y

will cause the creation of empty files resulting from empty result sets.

The default for this value is N, which means that an empty result set will not generate any empty files, just an error message saying that the print result is empty.

### **SYS-1019 - ExtractFromStored option added to XPI**

(Added in 7.0-0:4)

A new option ExtractFromStored has been added to the XPI to enable more strict control over text extraction be performed from a stored STRING field value.

The use of this feature requires TRIPnxp or TRIPjxp version 2.1-8 or later of the 2.1 series, alternatively version 3.0-2 or later of the 3.0 series.



## **New functionality for Windows platforms only**

### **SYS-976 - Enable special keypad functions in TRIPclassic**

Enable special keypad functions in TRIPclassic as well as change of background color and bold text marker.

For further information, please refer to the TRIPsystem installation Guide for Windows.



## Problems fixed in v7.2-7

### Fixes for problems on all platforms

#### **TRIP-5524: Using <dateform> with <curdate> in output formats**

No date was emitted when <dateform> was used with <curdate> in output formats.

#### **TRIP-5513: Sorting records might return an incorrect error message**

Sorting on a non-textual field could fail with the misleading error message “index of [DATABASE] in progress, please try again later”. A scenario leading up to this error would typically involve save/load status calls or sorting a search set from a database previously opened for searching but not set as current.

#### **TRIP-5492: Printed TFORM file might get incorrect character set**

If a printer definition file with a character set specification has been used to set up a printer in TRIP, a subsequent TFORM print order would incorrectly use that definition of character set when printing the TFORM file.

#### **TRIP-5469: Risk for crash when executing searches with long CCL orders**

Executing a search whose CCL order is close to 1000 characters or longer could cause the XPI library to crash when generating an alternative did-you-mean based CCL order.

#### **TRIP-5447: Passwords with national characters**

Passwords with national characters (e.g. with umlauts) created in TRIPmanager, TRIPjxp or TRIPnpx would not work for login in TRIPclassic, and vice versa. This issue also affected logins via TRIPhighway.

#### **TRIP-5441: DISPLAY memory leak when used in clusters**

The DISPLAY command leaked a small amount of memory every time a DISPLAY order was issued against a database cluster. For applications using a large amount of DISPLAY orders resulting in long term lists, this could lead to significant leaks in long-lived sessions.

#### **TRIP-5364: AND between NUMBER, TIME and DATE may yield incorrect results**

A search condition with an AND operator between a number, time and date field could yield incorrect results.



## Fixes for problems on Unix platforms only

### **TRIP-5455: Console mode tripnetd still turns into daemon**

The TRIP network access daemon tripnetd per default turns itself into a daemon. This is the standard behavior, but tripnetd also has an option "console" that allows it to be run in console mode (i.e. without it turning itself into a daemon). This option did not fully work on Linux and Solaris; tripnetd would still turn into a daemon, but log output would be emitted to the console.



## Problems fixed in v7.2-6

### Fixes for problems on all platforms

#### TRIP-5441: DISPLAY memory leak when used in clusters

(Changed in 7.2-6:4)

The DISPLAY command leaked a small amount of memory every time a DISPLAY order was issued against a database cluster. For applications using a significant amount of DISPLAY orders resulting in large term lists, this could lead to significant leaks in long-lived sessions.

#### TRIP-5410: Referencing many search orders in CCL would cause crash

(Changed in 7.2-6:2)

CCL expressions that reference more than 127 previous search orders would cause TRIP to crash. Also likely to cause a crash was when more than 255 search orders were executed against a database cluster, regardless of whether the license permitted more or not.

#### TRIP-5372: Crash when using databases created or indexed with TRIP 8.1

(Changed in 7.2-6:2)

Using databases created or indexed with TRIPsystem 8.1 or later with an older version of TRIP would cause the older version to crash if their file block size were configured to any other value than 2048, the block size always used by TRIP 8.0 and older.

Attempts to use a database with a larger block size than 2048 will now result in the following behavior in TRIPsystem 7.2:

Operation	BAF block size	BIF block size	Effect
Open single database for search	> 2048	> 2048	The BIF file could not be opened. TRIP treats the database as if it is not indexed. The resulting search set is empty. Data cannot be retrieved.  A warning message is returned when the database is opened.
Open single database for search	> 2048	2048	Database is successfully opened for search. Any attempt to retrieve data from it will fail with an error.
Open single database for search	2048	> 2048	The BIF files could not be opened. TRIP treats the database as if it is not indexed. The resulting search set is empty. A warning message is returned when the database is opened.  Search sets using record numbers (e.g. "FIND R=42") works normally, as does the retrieval of



Operation	BAF block size	BIF block size	Effect
data from such searches.			
A cluster with mixed block sizes is opened	Mixed	mixed	<p>The resulting search set will only include records from databases with a BIF block size of 2048.</p> <p>Attempting to retrieve data from databases BAF block size larger than 2048 will fail with an error.</p>

Note that using databases from newer versions of TRIP with older versions is not recommended, even if it often works fine. However, this correction results in such use failing gracefully in the described scenario rather than causing a crash.

### **TRIP-5365: Incomplete feature set assigned for some licenses**

(Changed in 7.2-6:2)

Licenses of type Small, Medium, Large or Enterprise may not assign all requisite features. Products may be missing, as may capability to create databases and modify data.

Custom licenses are not affected.

The license type can be found in the license file to the right of the label "License type". If it states anything other than "Custom commercial license, revision A", a new license must be requested in order to ensure proper functionality.

### **TRIP-5364: Incorrect results from AND between NUMBER, TIME and DATE**

(Changed in 7.2-6:4)

A search condition with an AND operator between a number, time and date field could yield incorrect results.

### **TRIP-5359: Invalid result when listing cluster members**

(Changed in 7.2-6:2)

There was a risk for invalid output from the TdbBaseInfo kernel API function when using the BASEINFO\_CLUSTERBASES mode to list the databases in the cluster. Applications written in TRIPjxp or TRIPnpx could experience this when requesting cluster membership information. The error could also manifest in TRIPjxp and TRIPnpx as an invalid database type for a search set.

### **TRIP-5337: Crash when starting session from TRIPjtk or TRIPclient**

(Changed in 7.2-6:1)

Several of the changes made to correct issue TRIP-5308 in the unpatched version 7.2-6 required a valid session state. This requirement was, however, not fully satisfied when starting sessions from applications using the legacy APIs TRIPjtk or TRIPclient / TRIPcom.

**TRIP-5312: Using INI files may cause tserver to crash**

Lines only ending with <LF> instead of <CR><LF> could cause the tserver to crash when parsing the specified INI file.

**TRIP-5308: High CPU consumption with clustered search/display**

Once having executed a clustered search or display order and the TDBS\_MAX\_THREAD was either unset or set to a non-zero value, the TRIP process would consume some CPU even when otherwise doing nothing.

With many concurrent sessions using clusters, this risked affecting the overall performance of the TRIP server.

**TRIP-5307: Crash when closing database**

TRIP would crash when closing a database after having used the SHOW command such that the associated TRIP kernel window was deleted prior to the closing of the database. This would primarily affect TRIPmanager, TRIPnxp and TRIPjxp.

**TRIP-5306: Crash when searching by TSTAMP in a cluster**

There was a high risk for a crash when executing a search by timestamp in a database cluster. Deactivating threaded processing of clusters could be used as a workaround, but result in lower performance.

**TRIP-5305: Crash when opening a cyclical database cluster**

Using the BASE command to open a database cluster that nests other clusters such that at some point the cluster will effectively cluster itself would cause the TRIP kernel to crash.

**TRIP-5303: XPI memory leaks retrieving data and listing databases**

Memory leaks have been fixed when retrieving database lists and when retrieving data from search results. The latter case could cause significant memory leaks, especially when hit focused data was requested.

**TRIP-5302: Risk for crash when retrieving data via the XPI**

Using TRIPjxp or TRIPnxp to retrieve data from search sets and rendered output formats (kernel windows) could cause memory access violations. The risk for this was centered around the retrieval of TEXT field values from records in a search set, and when retrieving output format results.

**TRIP-5301: Commands longer than 2 Kb may result in crash**

A command longer than 2 Kb executed via the DAO syntax would cause a buffer overrun in the TRIP kernel. The DAO syntax is used primarily by the XPI library, but may also be used by older (legacy) applications.

**TRIP-5298: Incorrect DISPLAY sorting in mixed character set clusters**

Executing a DISPLAY order sorted on frequency in a cluster with mixed character sets (e.g. LA1 and UTF-8) would not result in the correct term ordering.

**TRIP-5296: Classic may self-terminate shortly after started**

On some Linux distributions, TRIP Classic could shut itself down shortly after starting. This could happen already in the login screen while waiting for user input, or shortly thereafter while navigating menus or waiting for input in the CCL command window.

**TRIP-5284: Imported procedures may fail with “illegal character” error**

A procedure imported via the XPI would result in an “illegal character” error if the procedure specification contained extraneous newlines for one or more command in the procedure.

To correct existing procedures malfunctioning in this manner, either re-import the procedure, or edit the procedure (in TRIPclassic or in TRIPmanager) by removing the initial and trailing whitespace for each line in the procedure.

**TRIP-5270: Mandatory field value checks may fail**

Check for mandatory values would fail for TIME, INTEGER and NUMBER fields containing only empty sub-fields. That can happen if the field is part of a field tuple in which all fields must have the same number of sub-fields regardless of having contents or not.

**Fixes for problems on Unix platforms only****TRIP-5389: XPI sessions may fail due to missing OS dependencies**

(Changed in 7.2-6:2)

Starting TRIP sessions from TRIPmanager, TRIPjxp or TRIPnxp could fail due to broken dependencies in the `xpi` library in TRIPsystem. A typical missing dependency on newer Linux distributions such as CentOS 7 or 8 is `libnsl`. The installer script will now detect such missing dependencies and, if found, list them and exit with an error.

**TRIP-5328: tripd may stop executing batch jobs**

In rare cases, tripd could enter an anomalous state in which it would stop executing batch jobs for one or more databases. This error, once occurred for a database, persisted until tripd was restarted. A printout of "tripd -j" would, when this error had occurred, show for one or more databases a list of jobs where one appears to be running and several that are pending. Inspecting the process list (e.g. using the "ps" command) showed that there was no corresponding process for the job reported as running.





## Problems fixed in v7.2-5

### Fixes for problems on all platforms

#### **TRIP-5275: Global deletes not honoring SUPERMAN setting**

Having the SUPERMAN variable set and performing a global update as SYSTEM would not work if SYSTEM did not otherwise have full write access to the database.

#### **TRIP-5274: TRIPview-C not recognized in license**

A license for TRIP 7.2 that included TRIPview-C would not be recognized as including TRIPview-C when queried by TRIPview-C during its startup.

#### **TRIP-5273: TdbLoadStatus may keep database status**

Reverting to a session snapshot (using the TdbLoadStatus function) could in some cases restore the incorrect database as current.

This problem would only occur when all of the following conditions were true:

1. More than 7 databases have been activated (by a CCL BASE command or by a call to the API function TdbSetBase).
2. The currently open database is opened as number 6 or higher.
3. A snapshot is taken (TdbSaveStatus)
4. A new database or a previously opened database with ordinal number above 6, is opened.
5. Revert to the previous state (TdbLoadStatus(3), where the number 3 indicates that searches done will be deleted and that the previous database statuses shall be restored)
6. All searches will now incorrectly be done in the wrong database.

#### **TRIP-5269: Reopening a single DB cluster may revert to DB**

A single database cluster (having just one database, or several databases of which just one is accessible) would be regarded as a single database if reopened.

Searching would still work correctly, but information on what the database or cluster is associated with a particular search set would be incorrect (the name of a database instead of the name of the cluster).

#### **TRIP-5268: TdbLoadStatus may deactivate the wrong databases**

The API functions TdbSaveStatus and TdbLoadStatus are extensively used by the XPI library that serves TRIPnxp and TRIPjxp. When multiple databases are opened for search, there was a risk that the TdbLoadStatus call would incorrectly close databases that were open at the time of the checkpoint set by TdbSaveStatus. This would result in an error when the application, assuming that the current database is already open for search, would try to execute a query.

**TRIP-5251: Indexing a DB with a lot of term occurrences**

The default setting for the term limit during the record scan phase of the indexing procedure was too low. This limit controls how many terms can be kept in memory before a temporary file must be used. This limit being too low caused more temporary files to be created and thereby a slower indexing operation.

The term limit is guided by the TDBS\_TERMLM environment variable. Its default value was raised from 512K to its maximum, 131072K. The trigger for the creation of temporary files during indexing will therefore primarily be based on memory capacity, or by the environment variable TDBS\_MAX\_ALLO\_MEM, with a default of 1GB.

**TRIP-5250: Indexing a DB with a lot of phrase occurrences**

Indexing for the first time or re-indexing a database with many records having PHRASE field occurrences exceeding the integer maximum causes would cause the estimate of the required index file structure size to become too low. This had the effect that the index file needed to be reorganized many times, resulting in an index which might be slower to query and requiring more disk space than necessary.

**TRIP-5245: Risk for crash in DISPLAY with clusters**

Using the DISPLAY command with a database cluster could cause a kernel crash when running in threaded mode.



## Problems fixed in v7.2-4

### Fixes for problems on all platforms

#### **TRIP-5243: Memory leak in comforter**

The comforters for long-running search and sort operations would leak a small amount of memory when closed. In sessions running for a long time performing a lot of operations that utilize comforter functionality, this memory leak could over time become significant.

#### **TRIP-5236: Incorrect character set for Output format headers/trailers**

(Changed in 7.2-4:1)

When printing data to a printer it was possible to choose a character set different than that of the database by using a printer definition file. Any text in the output format, e.g. headers, trailers, separators, are would not be converted, resulting in an incorrect or terminated print-out.

#### **TRIP-5232: Retrieval of sorted search results may fail**

Retrieval of data from a sorted search set failed if the database associated with the search set was not the currently active one open for search. For instance, performing a search against ALICE, opening CORR, then retrieving data from the ALICE search in specified sort order.

#### **TRIP-5224: VIF file reorganization not working for large databases**

The index program would not reorganize the VIF file for very large databases having BIF index files with maximum bucket size. This resulted in reduced performance for truncated searches in large databases.

#### **TRIP-5223: Crash opening a cluster if max DB limit is exceeded**

The TRIP process would crash if the limit of max allowed open databases as specified in the license was exceeded during the opening of a cluster.

#### **TRIP-5221: Incorrect log file name for “PRINT NO HOLD”**

Printing a single database (not a database cluster) and using the NO HOLD option would create a log file that was not database-specific.

#### **TRIP-5220: Temporary files not removed for failed PRINT or UPDATE job**

If a print or global update job would fail, a temporary file starting with “prtmp” or “glbtmp” would remain in the home directory if TRIP is not set up for sending mails (which is default).

#### **TRIP-5217: Invalid charset for focused non-TEXT fields via XPI**

Requesting hit-focused PHRASE values via the XPI (using TRIPjxp or TRIPnxp) would produce incorrect non-English national characters.



### **TRIP-5206: Incorrect character set in printed TFORM**

Printing to TFORM or FILE was incorrectly using the character set in a defined printer.

This issue is solved as the following:

1. TFORM file output will get the same character set as the database and will have a marker at the very beginning of the file, e.g. ^CUTF for Unicode UTF-8.
2. Records from a single database printed to a file will get the same character set as the database without any marker.
3. A database cluster can only be opened if all of its databases have the same character set or if there is a mixture of UTF-8 and one other character set. File printout from a database cluster will get this selection, either UTF-8 or one other character set.

The points 2 and 3 above can be overridden by a character set specification in a printer definition file, PRN-file.

### **TRIP-5034: Premature termination of long searches**

Additional adjustments for the previous correction of this issue (in version 7.2-0), as the previous fix could cause long searches to be prematurely aborted when issued from applications using TRIPclient or TRIPjtk.

### **TRIP-5170: Errors from focus via XPI against part record databases**

(Changed in patches 7.2-1:1, 7.2-3:2, 7.2-3:3, and 7.2-4)

Fetching field values focused on hits using the field fetch types Focus, FocusOrExtract, FocusMergeParts and FocusOrExtractMergeParts could result in an error when used with databases having deleted part records, and when retrieving a mix of fields where at least one part field is requested with a MergeParts field fetch type and at least one part field is requested with regular fields retrieval.

## **Fixes for problems on Unix platforms only**

### **TRIP-5229: Resource leak in tripd on Linux**

The TRIP Daemon program (tripd) on Linux leaked an operating system resource (file descriptor) once per started TRIP session. This would eventually cause tripd to stop responding, leading to failure to run batch jobs for printing, indexing and global update, nor could any new sessions be established.

### **TRIP-5211: Intermittent crashes in tripd**

The TRIP Daemon program (tripd) could sometimes exit prematurely due to anomalous conditions caused by circumstances such as completed batch jobs for already exited sessions.



## **Fixes for problems on Windows platforms only**

### **TRIP-5218: Failure starting an encrypted session**

Attempting to start an encrypted session against a TRIPsystem installation on Windows would return an error message that a library could not be loaded.



## Problems fixed in v7.2-3

### Fixes for problems on all platforms

#### **TRIP-5207: The showlic tool may crash showing active license info**

The showlic tool, that is used to display information about the current installed and in-use license(s), would intermittently crash when the "--active" option was used.

#### **TRIP-5204: Incorrect accounting information when printing data**

Accounting information is missing or incorrect when printing records from databases not currently open and from database clusters.

#### **TRIP-5199: Classic term lists incorrect if database cluster was opened**

Term lists in TRIP classic data forms would not be correct entry if a database cluster has been open before.

For example, in this scenario:

```
BASe DB_CLUSTER
BASe DB13
DEfine ef=test1
EDit s=0
```

Pressing F1+D in field any phrase field results in a list showing terms from many of the databases in the database cluster DB\_CLUSTER instead of terms from the currently open database DB13.

If the cluster is closed with the CCL Close command, the display list is correct.

If the database cluster contains many databases, a crash might also happen when leaving the entry form.

#### **TRIP-5197: Classic linked field display lists may cause crash**

Display lists for linked fields in TRIP classic data entry forms are empty or causes a crash.

For example, in this scenario:

```
BASe db1
Define ef=test1
Edit S=0
```

Pressing F1+D in field F1 (the selector field for a linked database) results in an empty list. Doing the same for another field also having a linked database might cause a crash.

#### **TRIP-5197: Clusters not detected in chkdbfiles**

Upon finding a permanent cluster, the chkdbfiles tool would incorrectly attempt to analyze it as if it were a database.

**TRIP-5196: Search check fails in chkdbfiles for some databases**

The chkdbfiles tool was unable to open a database for search if its name is the same as the field name of an already checked database.

**TRIP-5195: File paths not always detected correctly in chkdbfiles**

The chkdbfiles tool would in several cases not detect BAF, BIF, and VIF file paths correctly if specified with a fully qualified path instead of a tdbb.conf symbol.

**TRIP-5193: Designs imported via TRIPmanager not marked as UTF-8**

Importing a database design via TRIPmanager would cause the comment, load ASE name, index ASE name and field restrictions to be truncated to one character. The import would thereby fail if the first character in the comment is a national, non-English character.

**TRIP-5189: Searching in multiple fields fails**

An expression specifying more than one field to match a particular search pattern would fail. For example:

```
FIND SNAME, RNAME=Mats
```



## Problems fixed in v7.2-2

### Fixes for problems on all platforms

#### **TRIP-5179: Merged subfields for layout retained PHRASE fields**

Phrase fields with layout retained having more than one subfield were incorrectly returned via the XPI with all subfield values merged into the first subfield.

#### **TRIP-5178: Garbage output for XPI hit focus on some TEXT fields**

Retrieving focused output from TEXT fields with empty paragraphs could result in garbage results.

TEXT fields with empty paragraphs are rare but they do occur. For example, when data is added by explicitly assigning non-consecutive paragraph numbers. The normal way to add TEXT values is to add the complete text and let TRIP detect paragraphs and sentences, in which case there will never be any empty paragraphs.

#### **TRIP-5177: Opening a new thesaurus may fail**

Opening a new, different thesaurus (using DEFINE THES) when one is already opened could cause a kernel crash.

#### **TRIP-5173: Hyphenated words yields “No hits” with FUZZ**

(Changed in patch 7.2-1:2)

Searching for a hyphenated word (e.g. mother-in-law) with the FUZZ command would result in no hits.

#### **TRIP-5172: Classification searches may crash**

(Changed in patch 7.2-1:2)

There was a risk for a kernel crash when performing a search in a database indexed with TRIPs built-in classification functionality.

#### **TRIP-5171: Terms not retrievable from some term sets**

(Changed in patch 7.2-1:2)

Attempting to retrieve terms from term sets with an ID number being a multiple of 8 would fail.

#### **TRIP-5170: Focus via XPI not working with deleted part records**

(Changed in patch 7.2-1:1)

Fetching field values focused on hits using the field fetch types Focus, FocusOrExtract, FocusMergeParts and FocusOrExtractMergeParts could result in an error when used with databases having deleted part records.





## Fixes for problems on Unix platforms only

### TRIP-5176: Endian violation for Solaris licenses

The TRIP license functionality would in some cases not perform little/big endian conversions of integer values when running on Solaris.

When installing this version or later on a Solaris machine, a new license file must be requested from your TRIP distributor if the version being upgraded from is 7.2-0 or 7.2-1.



## Problems fixed in v7.2-1

### Fixes for problems on all platforms

#### TRIP-5165: Wrong result from exact match search inside parenthesis

Using single quotation marks instead of double for text search might incorrectly return no hits if the expression is surrounded by parenthesis.

For example, the expression:

```
BASE alice  
FIN ('alice s' OR rabbit)
```

Would incorrectly return hits for "rabbit" only.

#### TRIP-5163: Missing highlights in exact match tuple search

Intersecting an exact match tuple search with another search would cause missing term highlights.

The following search expression against the ALICE demo database is an example of what would produce incorrect highlighting:

```
FIND queen and (PERSON='White Queen' AND.T SPEAKER='Red Queen')
```

#### TRIP-5162: Risk for crash when retrieving terms from a termset

Retrieving terms from a termset could cause a crash if there was at least one display order executed since the one that generated the termset.

NB: A termset is a TRIP kernel concept that is used to provide more performant access to long term lists and facets with a large number of values.

#### TRIP-5161: Duplicate termset registration

The same display order could be registered as a termset more than once, which led to a crash at a later stage when the termset were to be released. This has been corrected so that a display order can now only be registered as a termset once.

NB: A termset is a TRIP kernel concept that is used to provide more performant access to long term lists and facets with a large number of values.

#### TRIP-5157: Starting with default license may sometimes fail

Starting TRIP without any licenses installed would in some cases cause TRIP to fail to start, returning the error message "TRIP license missing" where it instead should use the default, non-commercial license.

#### TRIP-5156: Saving procedures not possible for long group/user names

Storing a procedure by explicitly assigning a group or user name would not work if the group or user name was longer than 16 characters.

**TRIP-5155: Reindex may keep index data for emptied database**

When reindexing a database, index data would be kept intact if the database only contained deleted records.

This scenario would cause the index program not to remove the record data being deleted:

1. Add a record to an empty database
2. Index the record or database
3. Delete the record
4. Re-index the database

**TRIP-5154: Facets and term lists may become inaccessible**

If more than eight facets or term lists were requested, there was a risk that the first eight ones would become inaccessible, leading to an error when the application attempted to use them.

**TRIP-5153: Write scopes not working for empty sets**

If the query that the write scope is based on yields no hits, the scope would not allow users to modify or delete records subsequently added that normally would be included in the scope.

**TRIP-5151: SAVE may sometimes omit the BASE command**

Using SAVE to create a procedure for a particular search could cause an omission of the BASE command in the procedure. This happened when the SAVE operation was executed within a SAVE/LOAD status block, as often will happen when executing CCL commands via TRIPnpx or TRIPjxp.

**TRIP-5150: Incorrect results when searching for negative integers**

Searching for negative integer values using the FUZZ command could produce incorrect search results.

**TRIP-5149: MODCON may fail with more than 50 databases in CONTROL**

Running MODCON, as is done during upgrade to introduce changes in the CONTROL database, would fail if more than 50 databases were registered in CONTROL. Failure would cause the CONTROL database not to be properly upgraded.

**TRIP-5146: Risk for crash in update of db with date restrictions**

Performing an insert or update of data in a database where the database design contains one or more DATE fields having a value restriction defined, the TRIP process could crash.

This affected TRIPsystem version 7.2-0.

**TRIP-5145: Incomplete history replace via XPI**

When issuing commands that affects the search history in other ways than just adding a new search (e.g. RENUM, LIST, FIND SAVE, CLOSE, and DELETE S=n), information on only the first



255 search sets would be sent back to the client. TRIP allows for up to 64k search sets (depending on licensing levels), so information search sets numbered 256 and higher would not be returned.

On the XPI client side, this affected the classes TdbHistoryDetail and TdbSearchSet in TRIPjxp and TRIPnpx.

### **TRIP-5123: Incorrect highlighting for some time values**

The hit highlighting of TIME type values was incorrect for time values smaller than 10:00:00, i.e. with an hour number lower than 10.

### **TRIP-5040: FUZZ abbreviated operators not always recognized**

The short form version of operators AND (+), OR (|), and NOT (-) were not recognized as operators if they were immediately adjacent to a search term. This would normally result in incorrect search results but could in some cases (e.g. when preceding a function call) cause a CCL syntax error.

## **Fixes for problems on Unix platforms only**

### **TRIP-5166: Possible garbage character on Classic login screen**

When starting TRIPclassic in a Unix environment, some garbage characters might show up in the upper left corner. Refreshing the screen with CTRL-L or CTRL-W removes it.

### **TRIP-5137: Installer script error on Debian 9**

After accepting the EULA conditions, there was an error from the chown command printed to the console before the installer proceeded with the next step. This error had no negative impact on the installation, however.

This problem was found on a Debian 9 Linux, but likely affected other Linux distributions as well. CentOS and RHEL were unaffected.

This affected TRIPsystem version 7.2-0.

## **Fixes for problems on Windows platforms only**

### **TRIP-5169: Windows start menu shortcuts break best practice**

Newer versions of Windows do not support nested start menu folders. The previous start menu folder structure used the vendor company name as top-level folder, under which the product and product-version folders would reside. With Windows 7 this looks as expected. But from Windows 8 only one folder is supported in the start menu. This resulted in that all shortcuts for all the vendor's software and software versions would end up in the same place, leading to difficulties telling product-version-specific shortcuts apart.

This issue has been corrected by having the product version folder at the top and not using additional nested folders.



## Problems fixed in v7.2-0

### Fixes for problems on all platforms

#### **TRIP-5117: Display orders may sometimes result in an empty term**

A display order such as DISPLAY S=NNN BASE would return an empty term if the previous display order was done on a numeric field.

#### **TRIP-5100: Global Tuple Delete Might Delete Wrong Subfields**

The wrong subfields would be deleted in a scenario like the following:

- A field tuple containing fields of mixed phrase and numeric types
- Make a search for a numeric value in a tuple field
- Delete the tuple hits by the search using a Global Delete

#### **TRIP-5089: Risk for Crash with Restricted-Write CONTROL**

Adding members to a group would cause a crash if the CONTROL database was write-restricted.

#### **TRIP-5088: Risk for Crash in Numeric Display Command**

A numeric display command would occasionally crash if preceded by another display command that included a search set restriction.

#### **TRIP-5087: Incorrect Message from Indexing Failure**

If the indexing of a database fails because of an error or warning state, there was a mail message sent saying that an index reorganization should be done for the database.

#### **TRIP-5086: Risk for Crash During Index Reorganization**

Index reorganization for databases with separate indexed fields could cause a crash.

#### **TRIP-5082: Incorrect Message when Cancelling Search**

An error message saying that the database is being indexed was returned when cancelling a sorted search, even if no indexing was being performed.

#### **TRIP-5081: Use of Stemming May Result in Fewer Records Found**

When searching for stemmed words via the FUZZ command, any stemmed word identical to its "unstemmed" form in the text would be ignored and thereby not found. E.g. "car" would not be found since its stemmed form is "car", but "cars" would result in a hit due to its stemmed form begin "car".

**TRIP-5080: Upgoing Loop in Polyhierarchical Thesaurus not Detected**

Up-going loops in thesauri were not detected, causing TRIP to hang in operations against such thesauri.

**TRIP-5070: Crash in TdbGetWindowHits**

The API function TdbGetWindowHits would cause damage to the stack memory in 64-bit versions of TRIP. This could cause the TRIP kernel to crash immediately or cause secondary errors at a later stage.

**TRIP-5063: Crash During SQL Aggregate Select**

When using TRIPsql for an aggregate SELECT (e.g. COUNT, SUM, etc), the TRIP kernel would crash. This issue affected the TRIPsystem 7.1-3 release.

**TRIP-5053: Risk for Crash when Canceling a Search**

When cancelling an ongoing search using ctrl-c in TRIPclassic or via the comforter API, there was a clear risk for a crash if the search included an OR-operation.

**TRIP-5051: FUZZ Returns Incorrect Number of Hits for an INT Field**

When using the FUZZ CCL command to search in an integer field, the reported number of hits would be incorrect.

**TRIP-5044: Risk for Crash When Sorting on Text Fields**

TRIP would crash when sorting on a TEXT field, where there would be at least one field value with a sentence of more than 1K characters in the beginning.

**TRIP-5043: Crash When Using Unique Integer Fields**

An attempt to add a value to an integer field marked as unique cause a crash.

**TRIP-5042: Long Values in Unique Phrase Fields Caused Crash**

Entering a value longer than 255 characters in a unique phrase field caused a crash.

**TRIP-5038: Invalid date format for date field restrictions**

If the FM of the database defined a value restriction on a date field, the dates were stored in the date format of the FM user. Whenever the field would be used by another user having a different date format, the stored restriction values would be incompatible and the field therefore unusable.

This functionality has been modified so that date field restriction values are now always stored in the YYYY-MM-DD form internally, and converted to/from the user's date format as needed. Existing date field restrictions will be automatically converted when read.

Note that automatic conversion of old restriction values may not always work. Existing databases with date field restrictions of a form that in some circumstances are ambiguous (e.g. YYMMDD and DDMMYY) should be reviewed by the FM and corrected if necessary.

**TRIP-5037: Truncated Search May Miss Terms**

When searching within a specific field using a truncation search mask, some terms would be missed in extremely rare cases.

**TRIP-5036: TFORM Load Fails for Unique Fields**

Loading a TFORM file failed for databases with unique fields, even if the TFORM did actually contain unique values for the fields in question.

**TRIP-5034: TBServer Process May Hang**

TBServer processes would hang if the client terminates while the server is executing an operation involving the comforter.

**TRIP-5032: Risk for Crash When Indexing DB with Unique Fields**

The index program could crash when indexing a database that contained one or more unique fields.

**TRIP-5030: Term Count Overflow in Index Log**

When more than MAX\_INT number of terms were found during the indexing of a database, the indexing log reported the term count as a negative number. The indexing itself was unaffected.

**TRIP-5023: Incorrect Information About Job Result**

Attempting to load a TFORM file into a database without any fields in its design would cause TRIP to report that the job completed successfully.

**TRIP-5022: Crash When Using Large Term Interval with Find**

TRIP would crash when issuing an order like "FIND T=1 TO 500" to find terms nr 1 to 500 from the most recent term list.

**TRIP-5020: Unterminated Quoted Phrase Caused Syntax Error**

If the last phrase value expression in a search order was left unterminated, the CCL parser would return the error message "Missing string quotation mark". For example:

➤ FIND person="queen

The CCL parser will now such an expression as if it were properly terminated.

**TRIP-5018: TdbGetRecordInSearchRis Crash**

The API function TdbGetRecordInSearchRis would crash if called with the rid parameter set to a non-zero value for the first call.

**TRIP-5016: Crash in LIST and CLOSE Commands**

The LIST and CLOSE commands could crash in some circumstances when accounting (the DEBIT log) was enabled.



The procedure that crashed involved showing records from a database that is open but not the one activated for search, then do something that will cause a search history update. For example:

BASE ALICE

FIND MAD HATTER

BASE CORR

SHOW S=2

LIST

CLOSE ALICE

STOP

## Fixes for problems on Unix platforms only

### TRIP-5118: Unread mails from TRIP causes large mailboxes

Whenever there is an error or other issue with a load, index, print or global update batch job, an email would be sent to the Unix/Linux user running the TRIP process (typically root), if the TDBS\_ERRMAILST tdbb.conf setting was empty or unset.

Since the built-in email services on Linux/Unix systems is not frequently used anymore, there is a high risk that these error and warning mails will remain unread. To avoid this, the error mail behavior in TRIP has been changed so that these mails are only sent to the users specified by the TDBS\_ERRMAILST tdbb.conf setting.

### TRIP-5113: Database creation may fail in a VMware virtual machine

The creation of databases could fail on Linux when run in a VMware virtual machine if the database location was set to a file share exposed by the host computer.

### TRIP-5026: Log, SIF and scratch directories not properly migrated

The tdbb.conf settings TDBS\_LOG, TDBS\_SCRATCH and TDBS\_SIF were kept at their old values during upgrade, even when set to their defaults under the old installation.

## Fixes for problems on Windows platforms only

### TRIP-5122: Spaces in install path interferes with batch jobs

If TRIPsystem were installed with spaces in the path (e.g. under C:\Program Files\...), batch jobs such as global update will not work properly.

In addition, any attempt to launch a batch job with TRIP installed under “C:\Program Files” or “C:\Program Files (x86)” was highly likely to create a file C:\Program, which would interfere with the start of any service (including tripd and tripnetd) installed under the same location.

If this problem has occurred and a file C:\Program exists, it must be manually removed before normal operations can resume.



**TRIP-5119: Risk for crash in Classic**

Fixed a problem in TRIP Classic on Windows that in some circumstances would cause it to crash, typically when navigating the menus.

**TRIP-5065: Invalid Error from Global Update on Windows**

When running a global update operation with no-index, the update job would incorrectly report an error code even when it succeeded.

**TRIP-5064: Risk for Crash During SORT on Windows**

There was a small risk for a crash when sorting a search set on Windows. This normally would pass undetected but could in some circumstances cause the kernel to crash.



## Problems fixed in v7.1-3

### Fixes for problems on all platforms

#### TRIP-1481 – XPI: Sorting larger SearchSet with comforter hangs

Using comforter (TdbNotificationSink) from Jxp/Nxp (XPI) may cause server hang or crash, changed Comforter implementation. Same case may happen also during long running search.

#### TRIP-406 – XPI: user AccessRights request work properly only for FM users

Incorrect access right were returned when requested does not possess FM right or checking thesaurus or cluster when requested from Jxp/NxP.

#### TRIP-1572 Incremental indexing stops working

Several issues related to incremental indexing fixed, e.g. index incorrect after: record deletion, record modification, several new record addition.

#### TRIP-176 FUZZ: missing operand

Using '-' in fuzz command causes error message 'missing operand'

Example in Alice: *fuzz king and –the*

#### TRIP-221 Deleting 1st record from db-search set does not indicate flag 7

When first record in DB is removed then this should be indicated by flag 7 but is 5 instead.

#### TRIP-444 Showing timestamp sorted records from a non-indexed database causes a crash

#### TRIP-584 XPI: Incorrect RID returned when fetching deleted record from the search set

Incorrect record ID set in Jxp/Nxp.

#### TRIP-746 FUZZ incorrectly handles indirect AND operation

Whereas command `"FUZZ CT('panadol') 'jenkins rachel'"` works as expected command `"FUZZ CT('panadol') 'jenkins rachel' or 'helle'"` returns "illegal order part" error.

#### TRIP-787 Disabled to login when logged in already

#### TRIP-802 Error 19618 message changed to "Phrase field restriction violation."

Error 19618 text message "Invalid phrase." is changed to "Phrase field restriction violation."

**TRIP-1600 Fetching record(s) from bigger sorted SearchSet is slow**

Working with records (loading next, previous bunch) in bigger SearchSet is slow, slow as the search itself.

**TRIP-2018 Transferring long strings via XPI takes extremely long**

Reading long texts from records from Jxp/NxP takes very long time.

**TRIP-1910 XPI: No hits exception when using TdbSearchFacet**

When using TdbFacet search from JxP/NxP using more fields query and if any field has no hit then exception was returned, now valid response is created with 0 results for this case.

**TRIP-667 Wrong date highlighting**

When searching for date in database with several date subfields incorrect date subfield (the first one) was highlighted.



## Problems fixed in v7.1-2:1

### Fixes for problems on all platforms

#### TRIP-488 – Incorrect time stamp in database log file

Incorrect value of timestamp in database log file.

#### TRIP-1268 – TRIPclassic Global Update runs into Segmentation fault

To reproduce this problem do following actions:

Use TRIP manager. Open database design CORR and make "Database reference" for field RNAME to database ALICE field PERSON.

Then type CCL commands:

```
BASE ALICE
BASE CORR
FIND r = 1
UPDATE cat=something where s=0
```

Wrong result: Batch job fails.

Correct result: Batch job completed successfully.

#### TRIP-1545 – System: sort crash

Sorting of UTF database might cause a crash.

#### TRIP-1570 – Showing timestamp sorted records from a non-indexed database causes a crash

To reproduce this problem execute following CCL commands:

```
BASE tdbherr
FIND r=from 1
s f=tst sort=tst
```

#### TRIP-1571 – Sort on text field in UTF does not work

Use TRIP Manager and do execution of following CCL commands:

```
BASE alice
FIND alice
SHOW sort=txt f=txt
```

Wrong result: Results are not correctly sorted.



## Fixes for problems on Windows platforms only

### TRIP-478 – TRIP might crash on 64-bits Windows when searching

Follow these CCL commands to reproduce error that might cause a crash:

*BASE* *alice*

*FUZZ* *person=#*



## Problems fixed in v7.1-2

### Fixes for problems on all platforms

#### TRIP-1139 – Illegal Order Part: DEfine THESaurus=PH:Thesali.PH:book

Follow these CCL commands to reproduce it:

```
base carroll  
FIND (What) and (person=(rabbit or alice))  
DEfine THESaurus=PH:Thesali.PH:book
```

#### TRIP-1000 – Different result for truncation mask search

Search with truncation mask (e.g. *find gl#*) produces incorrect results on huge databases

#### TRIP-894 – Login - NG is not a valid language code

Login twice with invalid credentials. After the second attempt user see message "NG is not a valid language code"

#### TRIP-893 – Search with empty result sets result into crash

Complex search with empty partial result set crash down.

#### TRIP-868 – The same query executed twice makes different results

Complex query executes twice produce different results for each attempt.



## Problems fixed in v7.1-1:3

### Fixes for problems on all platforms

#### TRIP-499 – Problem to manage database design in TRIPclassic

Follow these steps to reproduce it:

1. Start TRIPclassic as a user with file manager rights
2. Create a new database
3. Press Ctrl-K+7 to enter the field design window
4. Specify a field name and type
5. Press Ctrl-E to save.

The error occurs here

You can see get the message "No of subfields must be an integer."

#### TRIP-547 Show items from linked database causes segmentation fault

Show items from linked database causes segmentaiton fault.

Original ticket was 1602794 - Bayer Ticket PLI-158

#### TRIP-566 Term list of display incorrect

User is able to find non existing items in cluster search set.

*DISPLAY S=2 field\_name=#* can find values that are not in search set.

Original ticket was 1602795 - Term list of display incorrect - Bayer Ticket: SIDINTRA-86

#### TRIP-588 DISPLAY command cannot be used for numeric only databases

The values cannot be displayed in a term list, if database has no TEXT or PHRASE fields.

#### TRIP-635 Stop attempt to login several times in the same session

User was able to login multiple times in the same session. Bug is related to the web applications.

#### TRIP-673 Problem to install TRIPsystem on Chinese Windows

There is problem to install TRIPsystem on Chinese Windows.



## Problems fixed in v7.1-1:2

### Fixes for problems on all platforms

#### **TRIP-167 - Unable to start/work with Manager when using new locking mechanism on "My computer"**

User can not start TRIPManager when new locking mechanism is used on local computer and it is connected as "My Computer"

#### **TRIP-261 - Backport fix with hash initialization to 7.1 (related to new locking)**

TRIP does not show proper findings when new locking mechanism is used.

#### **TRIP-248 (SYS-1127) - Term lists of numeric fields (DATE/TIME/NUMBER) in database clusters show incorrect record hits**

Original problem was SYS-1127 – the previous fix was not correct.

#### **TRIP-268 - Unable to import XML database definitions with Chinese characters on Chinese Linux**

Problems appears only on Chinese Linux distribution. User cannot import database design from XML files to Linux server by TRIPmanager.

There is possible workaround. Set into tdbb.conf:

```
LC_ALL=zh_CN.UTF-8
```

To reproduce this problem on US/UK Linux modify tdbb.conf:

```
TDBS_CHARS=GBK
```

```
TDBS_LANG=CHI
```

```
LC_CTYPE=zh_CN.gb18030
```



**TRIP-293 - A search using several fuzz() combined with OR and AND might cause a crash**

To reproduce this bug type CCL commands:

*base testing*

*Find person=(fuzz(trevor) and fuzz(fiona) OR fuzz(wuest))*

This search leads to a crash if the result of the AND operation (which is executed first) is zero.

**TRIP-304 - Using TdbPutLine()/TdbInsertItem() for Part Names incorrectly removes all existing ones**

TdbPutLine()/TdbInsertItem() removes all exiting part names.

**TRIP-305 - Displaying thesaurus terms using the TRIPapi might need an open database**

This problem happens only when using TdbGetDisplayTerm() for fetching data.

**TRIP-449 – User listing returns also groups**

Type CCL command:

*show user*

In report you can see also groups.



## Problems fixed in v7.1-1:1

### Fixes for problems on all platforms

#### **SYS-1145 - A search query containing empty parenthesis might cause a loop**

Command causes TRIP run in infinite loop

*Find () and num=12*

#### **SYS-1139 (TRIP-238) - Sorting the result from a Duplicate() search function causes a crash**

Type commands:

*base alice*

*find duplicate(person,1)*

*s sort=speaker*

The last line causes application crash.



## Problems fixed in v7.0-4

### Fixes for problems on all platforms

#### **SYS-1105 - The output format filter <entitify> might cause loss of data**

The output format filter <entitify> might cause loss of output data or a crash.

#### **SYS-1107 - Replacing a value on a copy retains the old one**

(Changed in 7.0-4:1)

Replacing the values of a field when copying a record utilizing the copy operation introduced in the XPI in version 7.0-4 (issue nr SYS-1106) caused the new values to be appended to the old ones. The correct behavior is to remove the old values before any new ones are added.

#### **SYS-1108 - Crash when searching duplicates in misspelled field**

(Changed in 7.0-4:2)

TRIP might crash when searching duplicates in misspelled or not existing field.

#### **SYS-1109 - Field attributes Unique and Immediate Index caused crash**

(Changed in 7.0-4:2)

The field attributes "Unique" and "Immediate Index" might cause a crash or loop when storing records.

#### **SYS-1110 - Problem loading TFO file with STRING fields into Unicode db**

(Changed in 7.0-4:2)

Problem loading tform data with STRING fields into a Unicode database.

#### **SYS-1115 – Synchronously indexing same record repeatedly corrupts index**

(Changed in 7.0-4:3)

Indexing a single record repeatedly without doing a regular indexing run in between would corrupt the index, requiring a total re-index to set things straight.

#### **SYS-1116 - Layout retained text returned with extra space between sentences**

(Changed in 7.0-4:3)

When retrieving TEXT field values from a record that is not part of a search set, an extra space character would be emitted between sentences.

#### **SYS-1117 - Incorrect error message on database OS write protection**

(Changed in 7.0-4:3)



If the database files were write protected when a new record was inserted via the XPI, an incorrectly formatted error message "*Database <1> is UNIX write protected*" was returned with the variable <1> referring to something completely different than the name of the database.

### **SYS-1121 – Opening a large database cluster may hang or cause crash**

(Changed in 7.0-4:3)

Opening a cluster with a sizable number of databases and a large total number of records may hang the session or cause it to crash upon the BASE command that opens the cluster.

### **SYS-1122 - TFORM load with erroneous entries report success**

(Changed in 7.0-4:3)

The option --partial-as-error introduced in version 7.0-0 controlling when failing records should be considered an overall failure of the TFORM load had the opposite effect of the previous default. This reversed the previous behavior where partial loads were considered errors by default, causing the LOAD and LOADIX operations issued via TRIPclassic and TRIPmanager to behave in an incorrect manner.

The option --partial-as-error has been replaced with --ignore-errors, the default of which being false (no/off).

### **SYS-1124 - Creating empty part records not possible using TRIPtoolkit**

(Changed in 7.0-4:3)

Appending a part by using TdbSetRecordPart() with part number set to zero caused subsequent field modifications to be written to part one instead. This problem existed in versions 7.0-3:1 to 7.0-4:2.

### **SYS-1126 - Exact matching of several terms with Boolean operators gives incorrect result**

(Changed in 7.0-4:4)

Using operators inside bracket was not allowed but not indicated as error. Now it is possible to write conditions like speaker=('red' or 'footman') or down(queen or footman).

### **SYS-1127 - Term lists of numeric fields (DATE/TIME/NUMBER) in database clusters show incorrect record hits**

(Changed in 7.0-4:4)

### **SYS-1128 - Incorrect hit highlighting with TRIPjxp/nxp**

(Changed in 7.0-4:4)

Under special circumstances highlighting in jxp/nxp does not equals to TRIPmgr, TRIPclassic.

### **SYS-1129 - Unable to create a classification database with 16 characters in name**

(Changed in 7.0-4:4)

If you use a 16 chars name you get an error message.



## Fixes for problems on Unix platforms only

### SYS-1119 – Installer fails on new install after setdpwd call

(Changed in 7.0-4:3)

When performing a new installation of TRIPsystem that did not upgrade a previous installation or when there were no previous installation of TRIPsystem at all, the installation script failed after calling setdpwd, saying "*Failed to set TRIP daemon password*" and then exited. No other error messages were displayed or found in the installation log file.

## Fixes for problems on Windows platforms only

### SYS-1113 - Repair install fails with error message

(Changed in 7.0-4:2)

When attempting a repair install, an error message with the following text was shown: "*A CONTROL database from a previous installation was found in the installation directory. Please remove it and retry.*" The installer then exited without performing any repair actions.

This problem occurs in versions 7.0-3:2 to 7.0-4:1.

### SYS-1114 - Incomplete uninstallation

(Changed in 7.0-4:2)

The installation program was likely to fail to perform a full uninstallation if more than one version of TRIPsystem was installed. The items that may remain are:

- Services tripd and tripnetd remains registered as installed
- TRIPsystem bin directory remains in the system PATH environment variable
- Registry key HKEY\_LOCAL\_MACHINE\SOFTWARE\Tieto\TRIPsystem remains
- Registry key HKEY\_LOCAL\_MACHINE\SOFTWARE\Wow6432Node\Tieto\TRIPsystem remains on 64-bit systems

This problem occurs in versions 7.0-3:2 to 7.0-4:1. For more information, please refer to the "TRIP for Windows Installation Guide".

### SYS-1123 – Installer not setting conflator symbols

(Changed in 7.0-4:3)

The TRIPsystem installation program for Windows did not set the TDBS\_CONFLATORS and TDBS\_CONFLATOR\_LANG symbols. This omission could cause a crash upon an attempt to use stemming or stemming-based functionality.



## Problems fixed in v7.0-3

### Fixes for problems on all platforms

#### **SYS-183 - TdbGetRecordBuffer will loop if cursor specifies only 1 field**

TdbGetRecordBuffer will loop if cursor specifies only 1 field.

#### **SYS-253 - STATUS CLUSTER command gave inconsistent results**

The results of a CCL STATUS CLUSTER command were inconsistent when issued against open or closed clusters.

a) If the cluster was closed, the cluster status was shown.

b) If the cluster was open, the statuses of the individual databases were shown.

The STATUS CLUSTER command has been modified so that, behaviour (a) results regardless of whether the cluster is open or closed.

#### **SYS-1053 - Word restricted term list of phrase fields sometimes incorrect**

A word restricted term list of phrase fields sometimes gave incorrect record counts.

E.g.

Base my\_db

d word phr\_field1=#

This produced a list of words in the content of the phrase field phr\_field1 where the record count might be incorrect for all or some of the words.

#### **SYS-1058 - The CCL Fuzz() function might miss terms with low relevance**

The CCL Fuzz() function might miss some terms with lower relevance.

#### **SYS-1059 - Ambiguous return code from function TdbDeleteBaseDef**

Function TdbDeleteBaseDef should return different code for non existing DB, it did return the same code as for an existing database, 32579 "Database design for <1> deleted."

It now returns error 611 "Database {name} not found" for a non-existing database.

#### **SYS-1060 - Wrong return code for TdbDeleteBaseDef in documentation**

The documentation of DELETE BASE DEF (TdbDeleteBaseDef) contained return code '32578 Database design for {name} deleted. Operation completed successfully'  
This was incorrect, return code should be 32579.

#### **SYS-1065 - Import of db design with searchable parenthesis didn't work**

Importing a database design with parenthesis as searchable characters was not possible.



Importing a database design with  
SEARCH='&():'  
gave an error message, but using  
SEARCH='&()(:'  
worked fine.

### **SYS-1066 - Could not mix calls to TdbDaoOrder() and TdbExecuteCcl()**

Could not mix calls to TRIPapi functions TdbDaoOrder() and TdbExecuteCcl().

### **SYS-1069 - A Unicode session returned "No hits" for phrase searches**

A Unicode session returned "No hits" for phrase searches in non-Unicode databases.

### **SYS-1070 - Loading TFORM variable length data might cause garbled txt**

Loading TFORM variable-length data (e.g. UTF-8, GBK,...) might cause garbled text.

TFORM data is handled in chunks of 1K bytes. If the last character handled in a chunk was longer than 1 byte, following characters might become garbled. For UTF-8 this happens quite seldom but for GBK it happens more often.

### **SYS-1071 - Incorrect sentence detection for Chinese data**

The Chinese space character, GBK hex(a1a1) was incorrectly interpreted as a sentence separator.

### **SYS-1081 - Function TdbGetBaseDef erroneously returned 1**

Function TdbGetBaseDef returned 1 although database design did not exist. It now returns error 611 "Database {name} not found".

### **SYS-1082 - Creating empty part records not possible using TRIPtoolkit**

(Changed in 7.0-3:1)

Inserting a part by specifying a high part number in order to create some empty parts did not work. The part number was set to the next ordinal number independent on the value specified by TdbSetRecordPart(). E.g. inserting part records in the order 3, 2, 1 would cause all data entered to be stored in part number one.

### **SYS-1083 - Single record indexing did not always work correctly**

Single record indexing did not work for a non-properly indexed database.

If an index file (BIF) had been created by adding a new record in a database having a record name field, a subsequent single-record index would not work and reported "Nothing to index".

### **SYS-1084 - Printing from a non-Unicode database might cause a crash**

Printing/showing records from a non-Unicode database in a Unicode session might cause a crash.

This problem occurred when a sentence or a subfield was longer than 512 characters.



E.g. In TRIPmgr (which is always running a Unicode TRIP session) when you:

- 1) Opened a CCL window with the non-Unicode database Alice
- 2) Did "print now file=my\_file.txt" , the TRIP server crashed (on most platforms).

### **SYS-1085 - Data entry might cause the CCL parser to stop working**

(Changed in 7.0-3:1)

Data entry mixed with opening/closing the database might cause the CCL parser to stop working.

E.g. in TRIPclassic:

```
Base corr
Data Entry -> Modify -> modify a record and save
Close corr
Base corr
```

The last CCL command "Base" might not be recognized by the parser. It might take some iterations until the effect was visible.

### **SYS-1086 - A PRINT command reported success instead of failure**

(Changed in 7.0-3:1)

A PRINT command with an incorrect filename reported success instead of failure.

E.g. In TRIPmgr:

- 1) Connect to a non-Windows server
- 2) Print records using NOW or NO HOLD, specifying a Windows file path

This would give a success message in TRIPmgr but an error message in the log file on the server as a Windows file path is invalid on a non-Windows system.

### **SYS-1087 - TRIP looped with a search query like "1..3" AND jack**

(Changed in 7.0-3:1)

TRIP looped with a search query like "1..3" AND jack

A query like only "1..3" gave a crash or an error message saying 'No searchable characters...'

### **SYS-1088 – The operator AND.S didn't work across subfields/sentences**

(Changed in 7.0-3:1)

The operator AND.S didn't work across subfields/sentences.

### **SYS-1100 – XPI record locking may not unwind lock status properly**

(Changed in 7.0-3:2 and 7.0-3:3)

The pessimistic record locking functionality as available via the XPI did not unwind the locking status properly. The possible side effects included crashes and errors saying that an unlocked record still is locked.





## **SYS-1103 – Database read scopes causes incorrect results or a crash**

(Changed in 7.0-3:3)

Database read scopes causes incorrect results or a crash.

## **Fixes for problems on Unix platforms only**

### **SYS-1072 - The SIF file name path was limited to 64 bytes**

The SIF file name path was limited to 64 bytes; this limit is now removed.

## **Fixes for problems on Windows platforms only**

### **SYS-1089 - LDAP SSL Certificate Verification on 64-bit Windows**

(Changed in 7.0-3:2)

When using an SSL encrypted connection to an LDAP server, the SSL certificate verification would not succeed when connecting from a 64-bit TRIP installation on Windows.

As part of this fix, the 32-bit and 64-bit TRIP implementations of LDAP on Windows have been unified to use the native Windows LDAP access mechanism. The Mozilla LDAP libraries that previously were used in the 32-bit version to provide LDAP functionality on Windows are therefore no longer present.

The Mozilla-specific certificate database configuration on Windows has been replaced by the Windows certificate store of the local machine. In order for LDAP SSL connections to work from a Windows installation of TRIP, the issuer of the SSL certificate in use by the LDAP server must henceforth be found in the Trusted Root Certification Authorities store.

If the SSL certificate is issued by a certificate authority not normally listed in this store, the issuing certificate must first be added to Trusted Root Certification Authorities store in order for SSL verification to succeed.

The tdb.conf symbol TDBS\_LDAP\_SSL\_CERT\_DB can, if present, be removed from Windows installations.



## Problems fixed in v7.0-2

### Fixes for problems on all platforms

#### **SYS-898 - Very long output format headers might get partly duplicated**

(Changed in 6.2-8:1 and 7.0-2)

Output format headers longer than the page width or including line breaks might occasionally get partly duplicated.

#### **SYS-1032 - Initialization of Unicode normalizer not always done properly**

Initialization of Unicode normalizer was not always done properly. This would affect a.o. the Load utility as well as Global update.

#### **SYS-1033 - A search with large OR expr AND a small set was very slow**

Searching a large OR expression intersected with a small set/term was very slow.

A search operand with a small hit count was not distributed into parenthesized OR expressions.

E.g. The search expression:

Find fld1=xyz AND (fld2=a or fld3=b or c or d)

would take a long time if the OR expression contained a large number of hits even if the operand "fld1=xyz" returned a small number of hits.

#### **SYS-1034 - queryrcs -p didn't show values redefined by environment**

Using the queryrcs cmd with the option -p didn't show values redefined by the environment

#### **SYS-1035 - Incorrect paragraph/sentence detection for English text in ...**

Incorrect paragraph/sentence detection for English text in a Chinese environment.

Paragraphs and sentences were not detected for English text when storing data with a Chinese environment (TDBS\_CHARS=CHI/GBK).

This error caused the text to be just one long single sentence which in turn made searches for hits within a sentence always return hits, if the terms searched for existed somewhere in the complete text.

#### **SYS-1037 - Overriding TRIP config with \$HOME/.TRIPrcs did not work**

In TRIPsystem 6.2 and older it was possible to override the TRIP configuration with a .TRIPrcs file in the home directory of the OS user running the TRIP process.

This did not work in TRIPsystem 7.0-0 and 7.0-1.

**SYS-1038 - Corrupt scope fields in database access info for owners**

Obtaining the database access information via the XPI (e.g. from TRIPmanager) for a database that the current user is owner for returned corrupt scope fields

**SYS-1039 - Deleting Referential Integrity Foreign Key gave error msg**

Deleting a Referential Integrity Foreign Key gave an error message.

**SYS-1040 - Redirecting output from TRACER to a file hanged**

Redirecting output from the utility "tracer" hanged, even if the command is fully qualified.

E.g. `tracer -u my_username -p my_passwiord -d my_database -r 123 > myfile.txt`

hanged because "tracer" didn't exit after listing the data, it prompted and wait for the next action.

This problem has been solved, whenever a record or block number is entered as a command line argument, tracer will exit after executing the request.

**SYS-1042 - XPI update failed when no write access to record name field**

Updating a record in a TRIP database with a record name field fails if the logged on user does not have write access to the record name field.

**SYS-1045 - Add-on TRIP licenses were not usable**

Add-on TRIP licenses (i.e. licenses for TRIP that does not include TRIPsystem) did not have any effect. For example, installing an evaluation license for text classification or TRIPview did not enable this functionality.

**SYS-1047 - Db design import with PATH= gave incorrect filenames**

Importing a database design using the CCL modifier PATH generated incorrect BIF/VIF filenames.

**SYS-1048 - Indirect search in Chinese db might return incorrect hits**

An indirect search in a Chinese word segmented database might return incorrect hits.

**SYS-1049 - The max limit for TDBS\_DELETE\_MAX is only 255**

The max limit for deleting records set by TDBS\_DELETE\_MAX is only 255.

A possible workaround is to set this value using the CCL command: `Define delete max=nnn`.

The correction is not only to allow setting any value but also to set it to N, NOLIMIT or any string which is not starting with a digit, which will give a delete max of MAXINT.

Setting the value to 0 gives the result that deleting records is not allowed.

**SYS-1055 - Searching for tstamp values most often resulted in 'No hits'**

(Changed in 7.0-2.1)

Searching for tstamp values most often resulted in 'No hits'.

**SYS-1056 - Timestamp parameter of the Load utility resulted in a crash**

(Changed in 7.0-2.1)

Using the timestamp parameter of the Load utility resulted in a crash.

**SYS-1057 - TBS\_HOSTINI not the same on Unix and Windows**

(Changed in 7.0-2.1)

TBS\_HOSTINI was not handled in the same way on Unix and Windows. Also, TBS\_HOSTINI was not described correctly in the documentation.

**SYS-1058 - Fuzz() function might miss some terms with lower relevance**

(Changed in 7.0-2.1)

The CCL Fuzz() function might miss some terms with lower relevance.

**Fixes for problems on Unix platforms only****SYS-1012 - Error starting load or load/index jobs from CCL or TRIPapi**

(Changed in 7.0-0:4 and 7.0-2:2)

Starting load or load/index jobs from CCL or with TRIPapi method resulted in an error.

**SYS-1036 - stripping utility did not work with non-default port on UNIX**

The stripping utility did not work with non-default port number on UNIX platforms.

**SYS-1044 - UNIX process started by tripnetd had non-standard name**

The TRIP server processes started by tripnetd under Linux/Unix had non-standard name.



## Problems fixed in v7.0-1

### Fixes for problems on all platforms

#### **SYS-1021 - Display lists with transaction sets might show garbage**

Using Transaction sets with Display lists in a Unicode session would generate garbage for national characters.

#### **SYS-1022 - The "unique" property of a phrase field design had no effect**

Setting the "unique" property of a phrase field design had no effect

#### **SYS-1023 - Manager list using TRIPmgr/jxp/nxp might not show SYSTEM**

There was a problem related to retrieving a user/file/all manager list using TdbUserList(). When there was at least one user manager other than SYSTEM in TRIP, TdbUserList returned a manager list which included the SYSTEM user. But if there was no user manager other than the SYSTEM user in TRIP, it returned an empty list.

#### **SYS-1030 - Test for unindexed records incorrect in some TRIP utilities**

(Changed in 7.0-1:1)

The test for unindexed records was incorrect in TRIP utilities Packit and Pidit.

The result was that no warning about this state was written, and then if you just indexed the new BAF file (i.e. NOT reindexing the whole db) the result was that the index only contained the new unindexed records. To fix this, the whole database must be reindexed.

### Fixes for problems on Unix platforms only

#### **SYS-1024 - Error when inserting an empty string field via XPI on AIX**

Using TRIPnxp or TRIPjxp to insert a new record would cause an out of memory error on AIX if the insert request contained an empty STRING field value and a text extraction request with the BinaryCopyField flag set to false.

### Fixes for problems on Windows platforms only

#### **SYS-1025 - Saving a TRIP session to a file just created an empty file**

Saving a TRIP session to a specified file just created an empty file on Windows platforms.

The CCL command "Stop save file=my\_session.sif" would not save the contents of the session file into the specified file, it just created an empty file.



## Problems fixed in v7.0-0

### Fixes for problems on all platforms

#### **SYS-983 - Invalid database location names reported by XPI**

The XPI library provides TRIPmanager with location name symbols for directories where database files may be stored. On Unix/Linux some of the symbols returned did not correspond to directories, but files (e.g. shared objects).

#### **SYS-991 - An SDI scope definition might include an already seen record**

If a record is modified and indexed during the same second an SDI update will not exclude this record from the SDI scope.

#### **SYS-993 - Using immediate indexing of field content might cause a crash**

Using immediate indexing of field content or use of field uniqueness might cause a crash.

#### **SYS-996 - Incorrect highlight of non-Unicode dbs in Unicode session**

Incorrect hit highlight of non-Unicode databases in Unicode session.

This problem was seen with output formats, TRIPview and TRIPjxp/nxp sessions, mostly with Chinese GBK encoded databases accessed from Unicode sessions.

#### **SYS-1003 - Part records not fully working with STRING streaming in XPI**

(Changed in 7.0-0:3)

A request from TRIPnxp or TRIPjxp version 2.1-3 or later to retrieve large STRING field values from part records would always return the value from the first part, even when STRING field values for other part records were requested.

When with storing large STRING field values to part record fields, if more than one part record is added/updated for the record, the STRING field in all part records would get the value of the last part the application added/updated.

The TRIPsystem versions with this problem are 6.2-9:7 – 6.2-9:17 and 7.0-0 – 7.0-0:2. The client-side part of this problem is present in TRIPjxp and TRIPnxp versions 2.1-3, 2.1-4, 2.1-5, 2.1-6 and 3.0-0.

#### **SYS-1005 - TRIPsql crashed when an accounting file was in use**

(Changed in 7.0-0:4)

TRIPsql crashed when an accounting file (e.g. DEBIT.LOG) was in use.

#### **SYS-1006 – No data conversion for "Global copy" of recs between dbs**

(Changed in 7.0-0:4)



Data conversion was not done for "Global copy" of records between databases with different character sets.

### **SYS-1007 - Copying search forms caused a crash**

(Changed in 7.0-0:4)

Copying search forms caused a crash

### **SYS-1008 – Use Packit to Convert a db from one char. set to another**

(Changed in 7.0-0:4)

The Packit utility can now be used to convert a database from one character set to another.

It is only meaningful to convert from Latin-N or GBK to Unicode even if it is also possible to convert from Unicode to GBK or Latin-N.

### **SYS-1009 - Default max for Global Delete set to 100 records**

(Changed in 7.0-0:4)

The default value for global delete is lowered from unlimited to 100, This value can be set in two ways:

- 1) CCL command: Define delete max=nnn | no limit
- 2) TDBS\_DELETE\_MAX=nnn in the tdbb.conf or TRIPrcs file

### **SYS-1010 - Setting the license via TRIPmgr might return an error**

(Changed in 7.0-0:4)

Setting license via TRIPmgr might return an error.

Entering a new license via TRIPmgr onto a TRIPsystem installation that only has its (valid) installation license will incorrectly return the error message "The requested classification subsystem does not exist".

### **SYS-1011 - TRIPclassic data entry incorrect when deleting part records**

(Changed in 7.0-0:4)

TRIPclassic data entry incorrect when deleting part records using Gold-X.

This sequence of actions caused partial loss of a part record in a database with part records and part name field.

Actions:

- 1) Load a record having no part records
- 2) Gold-tab to create a new part record
- 3) Gold-tab to get back to the head record when data for the part record has been entered
- 4) Gold-tab to get back to the newly created part record
- 5) Gold-X to delete the only part record
- 6) Gold-tab to create a new first part record and enter data for the part record
- 7) Gold-tab to get back to the head record, causes the part record to vanish
- 8) Any attempt to re-create the vanished part record causes a message saying that the part name already exists; selecting another part name causes no problems



If auto-store of records is enabled, the record might need to be reloaded using a tform load.

### **SYS-1012 - Error starting load or load/index jobs from CCL or TRIPapi**

(Changed in 7.0-0:4)

Starting load or load/index jobs from CCL or with TRIPapi method resulted in an error.

### **SYS-1014 - Specifying a full filename in TDBS\_SIF might cause a crash**

(Changed in 7.0-0:4)

Normally TDBS\_SIF specifies a directory where the SIF files will be placed. This functionality was not affected by this error.

### **SYS-1016 - Text extraction in update via XPI may fail silently**

(Changed in 7.0-0:4)

A text extraction operation when updating a record via the XPI from TRIPnxp or TRIPjxp (using the classes TdbTextExtractInfo and TdbTextField) silently fails. Previously stored values would be unmodified by the update.

The TRIPsystem versions with this problem are 6.2-9:8 - 6.2-9:19 and 7.0-0 - 7.0-0:3.

### **SYS-1017 - Appending part records in update via XPI may cause crash**

(Changed in 7.0-0:4)

Appending a new part record to an existing record during update of a record via the XPI could cause the server process to crash.

### **SYS-1018 - Text extraction update to named part records via XPI fails**

(Changed in 7.0-0:4)

Text extraction during update of a record via XPI did not work against databases with a part record name field defined.

The operation appeared to succeed (no error reported), but the contents of the TEXT and STRING fields would be incorrect. Depending on usage scenario, either of these would be empty or retain the old value.

### **SYS-1020 - Text extraction update via the XPI may corrupt stored data**

(Changed in 7.0-0:4)

A text extraction operation via the XPI during the update of a record would cause the new file data to be appended to the existing value in the referred STRING field if the XPI update request did not include the STRING field.

The operation failed silently without throwing an exception or otherwise indicating any error.





## **Fixes for problems on Unix platforms only**

### **SYS-1002 - Data entry and TFORM load might cause a crash on Unix**

(Changed in 7.0-0:2)

Data entry and TFORM load might cause a crash on Unix systems when a database log file is used.

The reason for a crash is that the database log file by mistake is closed twice if it is locked by another user during the initial check if the file is available with write access. A crash happens quite seldom as this initial check is done only once during a session with data entry.

### **SYS-1004 – A PRINT NOW done from a CCL window crashed TRIPmgr**

(Changed in 7.0-0:4)

TRIPmgr crashed when doing PRINT NOW at a Linux server from a CCL window.