

Issues

| # | Project | Tracker | Status | Priority | Subject | Assignee | Updated |
|-----|--------------------|---------|----------|----------|---|-------------------|---------------------|
| 91 | The Hammer | Bug | New | High | CODEMAXEDIT.INI changes and an old preferences file | | 09/15/2017 08:59 AM |
| 67 | The Hammer | Bug | New | High | Add Scintilla Print feature | Wil van Antwerpen | 07/07/2021 07:22 PM |
| 58 | The Hammer | Bug | Closed | High | Missing adjust text while typing keywords feature | Wil van Antwerpen | 07/17/2017 11:10 AM |
| 50 | The Hammer | Bug | Closed | High | Running TH3 on a computer that never had TH installed throws errors | Wil van Antwerpen | 06/22/2017 05:13 PM |
| 33 | The Hammer | Bug | Closed | High | Change functionality on operator key words | Wil van Antwerpen | 07/06/2017 02:18 PM |
| 8 | The Hammer | Bug | Closed | High | create procedure and type space crashes hammer | | 03/20/2017 06:29 PM |
| 189 | DfRefactor | Bug | New | Normal | Refactor Calc/MoveInt does not save changes | | 08/12/2022 12:46 PM |
| 188 | DfRefactor | Bug | New | Normal | Keyword casing does not match DAWs case on some words | | 08/12/2022 12:37 PM |
| 187 | DfRefactor | Bug | New | Normal | drop self has issues with multiple objects on the same line | | 08/10/2022 06:49 PM |
| 184 | DfRefactor | Bug | New | Normal | Don't change casing for struct members | | 01/17/2021 12:26 AM |
| 182 | DfRefactor | Bug | Resolved | Normal | LoginEncryptionKey.inc should be an exception | Nils Svedmyr | 09/06/2021 08:09 AM |
| 181 | DfRefactor | Bug | New | Normal | Space in filename confuses parser | | 11/10/2020 03:37 PM |
| 180 | SyncFusion Library | Bug | New | Normal | Commenting out a column when using remember column logic breaks the list | | 10/22/2020 07:20 PM |
| 179 | SyncFusion Library | Bug | New | Normal | Pdf export has some issues with date columns | | 10/22/2020 07:17 PM |
| 178 | SyncFusion Library | Bug | New | Normal | Numeric data needs to be filled? | | 10/16/2020 03:07 PM |
| 177 | SyncFusion Library | Bug | New | Normal | Reordered columns don't always come back on reopening view | | 10/16/2020 03:06 PM |
| 176 | SyncFusion Library | Bug | New | Normal | Export functionality does not work when grouped | | 10/16/2020 03:18 PM |
| 173 | dfSplat | Bug | New | Normal | Property tooltip evaluations in another object show wrong value | | 07/16/2020 02:47 PM |
| 170 | dfSplat | Bug | New | Normal | Array properties tooltip value evaluation | | 03/11/2020 02:01 PM |
| 167 | The Hammer | Bug | Resolved | Normal | WebSet does not trigger object suggestion list | | 01/25/2020 06:50 PM |
| 165 | The Hammer | Bug | New | Normal | dbBldr and dbExplore in database menu open from current workspace instead of selected workspace | | 10/11/2019 10:30 AM |
| 163 | The Hammer | Bug | Resolved | Normal | Trouble with codepages | | 11/15/2019 09:52 PM |
| 161 | DfRefactor | Bug | Resolved | Normal | Reindent a nested case get indented wrong | | 11/28/2019 10:01 PM |
| 160 | DfRefactor | Bug | New | Normal | Multiple line code with variable type casting mistaken for variable declaration | | 01/11/2023 11:31 AM |
| 159 | DfRefactor | Bug | New | Normal | Unused variables, variable that has a comma does not get recognized | | 07/12/2019 11:13 AM |
| 158 | DfRefactor | Bug | New | Normal | Running a refactor over MSExcels can be really slow | | 07/10/2019 01:51 PM |
| 157 | DfRefactor | Bug | Closed | Normal | In to contains refactor option breaks insert command | | 11/28/2019 11:22 PM |
| 155 | DfRefactor | Bug | New | Normal | Reindent issue with indicators before loop | | 07/02/2019 01:17 PM |

| # | Project | Tracker | Status | Priority | Subject | Assignee | Updated |
|-----|--------------------------------|---------|-------------|----------|--|----------|---------------------|
| 154 | The Hammer | Bug | New | Normal | Search into a collapsed source will not open the node | | 07/02/2019 01:00 PM |
| 153 | The Hammer | Bug | New | Normal | Change color theme without apply still changes your theme | | 06/19/2019 08:02 PM |
| 150 | The Hammer | Bug | New | Normal | Method Extract: Simple array variables are not recognized | | 06/01/2019 12:04 AM |
| 149 | The Hammer | Bug | In Progress | Normal | Method Extract: Partial variable name check | | 06/02/2019 01:43 AM |
| 148 | The Hammer | Bug | Closed | Normal | Method Extract: Procedure without parameters not called | | 06/03/2019 04:41 PM |
| 147 | The Hammer | Bug | New | Normal | Method Extract: Mislabeled IN on variables that are initialized in the method | | 05/31/2019 07:48 PM |
| 146 | The Hammer | Bug | Closed | Normal | Method Extract: Changing to function does put return type in invocation | | 06/03/2019 04:40 PM |
| 145 | The Hammer | Bug | Closed | Normal | Method Extract: Indent the preview screen | | 06/03/2019 04:39 PM |
| 144 | The Hammer | Bug | New | Normal | Method Extract: OUT is not always correctly identified | | 05/31/2019 07:33 PM |
| 143 | The Hammer | Bug | Closed | Normal | Method Extract: top comment, display database fields as "db" | | 06/03/2019 04:38 PM |
| 137 | DfRefactor | Bug | Closed | Normal | Function autocomplete end comment optional | | 05/01/2019 06:27 PM |
| 136 | The Hammer | Bug | New | Normal | Studio - open current file should be in the default menu | | 04/29/2019 10:43 PM |
| 135 | The Hammer | Bug | Closed | Normal | Tool panel drag and drop has no undo | | 06/03/2019 04:40 PM |
| 131 | DfRefactor | Bug | New | Normal | DF CM images, do not remove blank lines | | 03/12/2019 11:28 AM |
| 130 | DfRefactor | Bug | New | Normal | In DF CM images, sometimes 4 spaces are inserted | | 03/12/2019 11:26 AM |
| 127 | DfRefactor | Bug | Closed | Normal | Starzen test case if-else statement with semicolon and begin on next line | | 11/28/2019 11:14 PM |
| 125 | DfRefactor | Bug | Closed | Normal | Reindent comment after class ends up at column 0 | | 11/28/2019 11:17 PM |
| 124 | DfRefactor | Bug | New | Normal | double if is not handled well with if/else refactoring | | 02/02/2019 08:12 PM |
| 123 | DfRefactor | Bug | New | Normal | Internal expression error on Reindent | | 02/01/2019 12:30 AM |
| 121 | The Hammer | Bug | New | Normal | Objec neighborhood refactoring and BPOs | | 12/04/2018 05:11 PM |
| 120 | The Hammer | Bug | New | Normal | Add scope word into the keyword list breaks code collapse and reindent | | 11/27/2018 12:20 PM |
| 119 | Source Code Tools | Bug | New | Normal | if/else refactor adding begin/end in a string literal | | 09/22/2018 11:19 PM |
| 117 | Source Code Tools | Bug | New | Normal | Counters not correct at end of run | | 08/16/2018 01:45 PM |
| 114 | Source Code Tools | Bug | Closed | Normal | A Swedish developer found out that extended characters got mangled up | | 08/16/2018 01:49 PM |
| 113 | Source Code Tools | Bug | New | Normal | re-indent logic on case begin | | 08/07/2018 12:35 AM |
| 110 | The Hammer | Bug | New | Normal | Use regex in replace | | 04/14/2018 11:05 AM |
| 109 | The Hammer | Bug | In Progress | Normal | Reindent, do not indent goto/gosub labels | | 09/10/2018 01:56 PM |
| 108 | The Hammer | Bug | New | Normal | regex search uses length of expression for highlighting | | 04/14/2018 10:57 AM |
| 107 | The Hammer | Bug | New | Normal | Reindent on conditional looping statement wrong. | | 04/14/2018 10:50 AM |
| 106 | The Hammer | Bug | New | Normal | Code highlighting for constant integer define only works on hex, not decimals | | 04/04/2018 12:32 PM |
| 105 | vWin32fh Windows File Handling | Bug | Closed | Normal | Using vSHGetFolderPath vCSIDL_MYDOCUMENTS in Windows 10 does not return a result | | 03/23/2018 01:07 PM |
| 101 | The Hammer | Bug | New | Normal | Control character shows up when hitting an unknown key combo | | 02/22/2018 03:44 PM |

| # | Project | Tracker | Status | Priority | Subject | Assignee | Updated |
|-----|--------------------------------|---------|-------------|----------|---|-------------------|---------------------|
| 100 | The Hammer | Bug | Rejected | Normal | Scroll then click on a line pops up dialog | Wil van Antwerpen | 04/05/2018 10:59 PM |
| 99 | The Hammer | Bug | Closed | Normal | Search highlight isn't always highlighted | | 04/06/2018 02:36 PM |
| 98 | The Hammer | Bug | Closed | Normal | Statusbar line number is not updated when using line up/down select | | 04/06/2018 02:36 PM |
| 97 | The Hammer | Bug | New | Normal | Register workspace in Hammer instead of by using the Studio | Wil van Antwerpen | 11/14/2017 12:13 AM |
| 96 | The Hammer | Bug | Closed | Normal | Search and Replace should start from being | Wil van Antwerpen | 04/06/2018 02:37 PM |
| 95 | The Hammer | Bug | Resolved | Normal | Error on close after deleting a file currently edited in Windows explorer | | 09/09/2018 10:52 PM |
| 93 | The Hammer | Bug | New | Normal | OEM Line Draw characters are not correctly drawn in the editor | | 09/18/2017 09:21 PM |
| 92 | The Hammer | Bug | New | Normal | Menu Database > database viewer opens dbExplorer in the wrong workspace | | 09/18/2017 09:17 PM |
| 90 | The Hammer | Bug | Closed | Normal | Re-Indent indents dataflex images in console mode | | 09/18/2017 09:19 PM |
| 88 | The Hammer | Bug | Closed | Normal | Refactor Object Neighborhood does not work on if/else | Wil van Antwerpen | 09/14/2017 03:13 PM |
| 87 | vWin32fh Windows File Handling | Bug | Resolved | Normal | ParseFolderName: if filename part of path then not returning correct path | Wil van Antwerpen | 09/05/2017 11:20 AM |
| 85 | The Hammer | Bug | Closed | Normal | code collapse is executed when the user clicks anywhere between the [-] | Wil van Antwerpen | 09/12/2017 11:49 PM |
| 83 | The Hammer | Bug | New | Normal | Shortcut keys on translated dialogs are static | | 08/25/2017 10:05 AM |
| 82 | The Hammer | Bug | New | Normal | Shortcut keys do not show up after translation or might be wrong if they do | | 08/25/2017 09:39 AM |
| 76 | The Hammer | Bug | Resolved | Normal | Last open file reopens file even if closing TH3 with no file open | | 02/20/2020 02:27 PM |
| 74 | The Hammer | Bug | New | Normal | Keyboard shortcuts don't work when focus not on editor | Wil van Antwerpen | 07/24/2017 02:03 PM |
| 66 | The Hammer | Bug | Closed | Normal | Scintilla incorrectly shows marker braces | Wil van Antwerpen | 07/06/2017 02:13 PM |
| 63 | The Hammer | Bug | Closed | Normal | CM_PosFromChar scintilla support | Wil van Antwerpen | 07/25/2017 08:40 PM |
| 62 | The Hammer | Bug | Closed | Normal | Make Replace Dialog replace | | 07/17/2017 11:08 AM |
| 57 | The Hammer | Bug | Resolved | Normal | Trying to complete Class (first time appearance) - code list is empty: | Wil van Antwerpen | 07/25/2017 08:42 PM |
| 56 | The Hammer | Bug | Closed | Normal | Scilexer - make scope keywords configurable | Wil van Antwerpen | 07/06/2017 02:15 PM |
| 54 | The Hammer | Bug | Closed | Normal | Scilexer - Issue with detection of hexadecimal numbers | Wil van Antwerpen | 07/06/2017 02:15 PM |
| 53 | The Hammer | Bug | In Progress | Normal | Block select should allow you to edit multiple rows at the same time. | Wil van Antwerpen | 06/26/2017 08:39 PM |
| 52 | The Hammer | Bug | Closed | Normal | SciLexer.dll - EOL Comment after embedded quotes is seen as EOL comment | Wil van Antwerpen | 07/06/2017 02:16 PM |

| # | Project | Tracker | Status | Priority | Subject | Assignee | Updated |
|-----|------------|---------|-------------|----------|---|-------------------|---------------------|
| 51 | The Hammer | Bug | Closed | Normal | SciLexer.dll - embedded quotes within string is seen as unclosed string | Wil van Antwerpen | 07/06/2017 02:16 PM |
| 49 | The Hammer | Bug | Closed | Normal | Clicking save icon while focus is on code explorer triggers error 98 | Wil van Antwerpen | 08/12/2017 12:35 PM |
| 36 | The Hammer | Bug | In Progress | Normal | TH3: Unable to find packages from DataFlex version | Wil van Antwerpen | 03/31/2017 08:11 PM |
| 35 | The Hammer | Bug | Closed | Normal | Scintilla last char missing | Wil van Antwerpen | 03/29/2017 09:25 PM |
| 34 | The Hammer | Bug | Closed | Normal | Parser chokes on IFDEF statement in cEditorEdit.pkg | Wil van Antwerpen | 03/28/2017 11:32 PM |
| 31 | The Hammer | Bug | Closed | Normal | Use a default non western codepage and using local characters show up as ???? | | 07/25/2017 08:40 PM |
| 30 | The Hammer | Bug | Closed | Normal | Line number margin width should be set automatically on growing/shrinking lines | Wil van Antwerpen | 03/29/2017 09:25 PM |
| 29 | The Hammer | Bug | Closed | Normal | Undo should never work past the initial file read | Wil van Antwerpen | 03/29/2017 09:26 PM |
| 28 | The Hammer | Bug | Resolved | Normal | Matching braces appears to try and match over multiple lines | Wil van Antwerpen | 03/29/2017 10:13 AM |
| 23 | The Hammer | Bug | New | Normal | Dependency scanner appears to be broken | | 03/20/2017 06:00 PM |
| 22 | The Hammer | Bug | New | Normal | Added CodeSpy app to config, but does not start | | 03/20/2017 06:00 PM |
| 21 | The Hammer | Bug | New | Normal | Sometimes file shows up as readonly | | 03/20/2017 06:00 PM |
| 18 | The Hammer | Bug | New | Normal | Superfluous end_function crashes the parser | | 03/20/2017 06:00 PM |
| 16 | The Hammer | Bug | Resolved | Normal | Goto line fails when focus on code explorer tree | | 03/20/2017 06:00 PM |
| 15 | The Hammer | Bug | Closed | Normal | Starting Hammer comes up with another view as when closed | Sergey Natarov | 07/06/2017 02:19 PM |
| 9 | The Hammer | Bug | New | Normal | Column operation should not invoke closed bracket check | | 03/20/2017 06:00 PM |
| 7 | The Hammer | Bug | Closed | Normal | Code complete on find eq by crashes with mertech driver | | 03/20/2017 06:22 PM |
| 5 | The Hammer | Bug | Closed | Normal | FMAC file in Hammer will cause high memory usage | | 03/20/2017 06:08 PM |
| 191 | DfRefactor | Feature | New | Normal | Unused local variables & commented code | | 01/11/2023 11:39 AM |
| 190 | DfRefactor | Feature | New | Normal | Unused variables to also delete blank line | | 01/11/2023 11:36 AM |
| 175 | dfSplat | Feature | New | Normal | Trace timings via a flamegraph | | 10/03/2020 09:56 PM |
| 174 | dfSplat | Feature | New | Normal | Add support for Web Applications | | 10/03/2020 09:56 PM |
| 171 | dfSplat | Feature | New | Normal | Export Object list for comparing object usage over time | | 03/30/2020 04:23 PM |
| 166 | DfRefactor | Feature | New | Normal | Can you colour the icon using the DAW orange? | | 10/11/2019 10:36 AM |
| 164 | DfRefactor | Feature | New | Normal | Possibility to save settings | | 09/06/2019 05:51 PM |
| 162 | DfRefactor | Feature | New | Normal | Rerun a ifelse refactoring with another refactoring choice | | 08/21/2019 10:59 PM |
| 142 | DfRefactor | Feature | New | Normal | Add Search and Replace dialog | | 05/20/2019 09:38 PM |

| # | Project | Tracker | Status | Priority | Subject | Assignee | Updated |
|-----|--------------------------------|------------|----------|----------|---|-------------------|---------------------|
| 126 | DfRefactor | Feature | Resolved | Normal | Reindent comment, if not space before then please do not indent | | 03/08/2019 06:26 PM |
| 112 | The Hammer | Feature | New | Normal | Add if/then/else on the same line refactor method | | 06/07/2018 01:37 AM |
| 111 | The Hammer | Feature | Closed | Normal | Add Ignore Comments feature to Find in Files | | 06/04/2018 02:05 PM |
| 103 | The Hammer | Feature | Closed | Normal | Code collapse on sections | | 06/03/2019 04:42 PM |
| 102 | The Hammer | Feature | Closed | Normal | Add a way to disable creating .bak files | Wil van Antwerpen | 04/06/2018 02:35 PM |
| 89 | The Hammer | Feature | New | Normal | Code complete based on code from previous line | | 09/13/2017 12:52 PM |
| 79 | The Hammer | Feature | New | Normal | Add option for delimiter in the menu | | 08/18/2017 02:16 PM |
| 77 | The Hammer | Feature | New | Normal | Convert tab to spaces - spaces to tab on selected text | | 08/16/2017 11:11 PM |
| 68 | The Hammer | Feature | New | Normal | Add copy as RTF | | 07/17/2017 11:38 AM |
| 64 | The Hammer | Feature | New | Normal | Use annotations for warnings and errors | | 06/25/2017 03:19 PM |
| 48 | vWin32fh Windows File Handling | Feature | New | Normal | FR: Ability to show the last windows error | | 04/11/2017 08:20 PM |
| 42 | The Hammer | Feature | Closed | Normal | Code collapse - expand all, collapse all | | 06/25/2017 02:00 PM |
| 37 | The Hammer | Feature | New | Normal | Use annotations if there's an unmatched brace when you go to the next line | | 03/29/2017 11:13 AM |
| 27 | The Hammer | Feature | Closed | Normal | TH3: Make trim whitespace at End of Line on save configurable | | 04/06/2018 02:40 PM |
| 26 | The Hammer | Feature | Closed | Normal | Workspace needs more as 10 projects | Sergey Natarov | 07/06/2017 02:17 PM |
| 25 | The Hammer | Feature | New | Normal | Workspace selector should not depend on Studio for registering new workspaces | | 03/27/2017 12:23 AM |
| 24 | The Hammer | Feature | New | Normal | Add classes from wherever studio stores them | | 03/27/2017 12:24 AM |
| 20 | The Hammer | Feature | New | Normal | Add Back/forward navigation logic | | 03/20/2017 06:00 PM |
| 19 | The Hammer | Feature | New | Normal | Display easy DDO buffer | | 03/20/2017 06:00 PM |
| 17 | The Hammer | Feature | Resolved | Normal | Select Studio from the menu should open in selected workspace | | 03/20/2017 06:00 PM |
| 14 | The Hammer | Feature | New | Normal | Open File Under Cursor on table should open | | 03/20/2017 06:00 PM |
| 13 | VDF Splat | Feature | New | Normal | DfSplat: Add profiling | | 03/23/2017 12:53 PM |
| 12 | VDF Splat | Feature | New | Normal | DfSplat: Play a sound on breakpoint | | 03/23/2017 12:53 PM |
| 11 | VDF Splat | Feature | New | Normal | DfSplat: Break on condition | | 03/23/2017 12:52 PM |
| 6 | The Hammer | Feature | New | Normal | Better Refactoring | | 03/20/2017 06:10 PM |
| 4 | The Hammer | Feature | New | Normal | TH3: Support for source with line endings other as CRLF | | 03/20/2017 05:38 PM |
| 186 | cFileSystem Library | Suggestion | New | Normal | inconsistency regarding pbEOF property | | 06/01/2021 09:15 AM |
| 185 | DfRefactor | Suggestion | New | Normal | Comments at column 0 should not be indented | | 01/17/2021 12:29 AM |
| 183 | DfRefactor | Suggestion | New | Normal | Indenting of use Statements to respect scope | | 01/17/2021 12:23 AM |
| 156 | DfRefactor | Suggestion | New | Normal | Add line x of y to running process dialog | | 07/03/2019 01:00 PM |
| 152 | The Hammer | Suggestion | New | Normal | Show comments for method in tooltip | | 06/13/2019 06:32 PM |

| # | Project | Tracker | Status | Priority | Subject | Assignee | Updated |
|-----|-------------------|------------|-------------|----------|--|-------------------|---------------------|
| 151 | DfRefactor | Suggestion | New | Normal | Include filenames of changed files in the log file | | 10/11/2019 10:37 AM |
| 141 | DfRefactor | Suggestion | New | Normal | Add in a subclass layer to an entire, mature, project | | 05/06/2019 07:25 PM |
| 140 | DfRefactor | Suggestion | New | Normal | Create a refactoring option for changing form height | | 05/02/2019 02:24 AM |
| 139 | DfRefactor | Suggestion | New | Normal | Register_Object auto removal for web objects | | 05/02/2019 02:20 AM |
| 138 | The Hammer | Suggestion | New | Normal | Comment at the end of function autocomplete optional | | 05/02/2019 02:17 AM |
| 134 | DfRefactor | Suggestion | New | Normal | FR: GetAddress to move addressof | | 03/17/2019 01:55 PM |
| 133 | DfRefactor | Suggestion | New | Normal | FR: Old Style IN to CONTAINS | | 03/12/2019 11:31 AM |
| 132 | DfRefactor | Suggestion | New | Normal | FR: Old style compare operators to new style | | 03/12/2019 11:30 AM |
| 129 | DfRefactor | Suggestion | New | Normal | FR: Trim command to move trim | | 07/05/2019 11:00 AM |
| 128 | DfRefactor | Suggestion | New | Normal | FR: Indicate found to move found | | 03/12/2019 11:23 AM |
| 122 | DfRefactor | Suggestion | New | Normal | Do not reindent files on the unused files list | | 02/01/2019 12:28 AM |
| 118 | The Hammer | Suggestion | Closed | Normal | After external edit reload on current line | | 06/03/2019 04:42 PM |
| 115 | Source Code Tools | Suggestion | New | Normal | Add option to remove unused variables | | 08/08/2018 10:20 AM |
| 104 | The Hammer | Suggestion | Closed | Normal | Multi row file tabs | Wil van Antwerpen | 04/06/2018 02:34 PM |
| 70 | The Hammer | Suggestion | New | Normal | See if supporting editorConfig makes sense | | 07/23/2017 10:36 AM |
| 69 | The Hammer | Suggestion | In Progress | Normal | Look at following defaults | Wil van Antwerpen | 07/24/2017 02:04 PM |
| 169 | DfRefactor | Bug | New | Low | Unused variables: Struct declared within a method has its guts removed | | 01/23/2020 12:05 AM |
| 75 | The Hammer | Bug | Closed | Low | Drag and drop from file explorer with no files open fails | | 06/03/2019 04:43 PM |
| 55 | The Hammer | Bug | New | Low | INI file does not use defaults when upgrading | | 06/22/2017 05:50 PM |
| 46 | The Hammer | Bug | New | Low | CM: Using enter on a suggestion list inserts unwanted enter in text | | 04/08/2017 08:15 AM |
| 45 | The Hammer | Bug | New | Low | CM: Suggestion list can overlap what you type | | 04/08/2017 08:35 AM |
| 116 | Source Code Tools | Feature | New | Low | Add method/object name as comment at the end | | 08/14/2018 10:32 AM |
| 78 | The Hammer | Feature | New | Low | Code explorer support for gosub/goto labels | | 08/17/2017 08:59 AM |
| 73 | The Hammer | Feature | New | Low | Tab Group support | | 07/23/2017 10:35 AM |
| 47 | The Hammer | Feature | Rejected | Low | TH3: Make function autoselection list disappear after no more matches | | 06/25/2017 01:52 PM |
| 32 | The Hammer | Feature | Closed | Low | Make scope words configurable | | 06/25/2017 01:48 PM |
| 41 | The Hammer | Suggestion | New | Low | Display annotation help for properties already defined | | 03/29/2017 04:52 PM |
| 40 | The Hammer | Suggestion | New | Low | Have option to change whitespace to tabs and viceversa | | 03/29/2017 04:50 PM |