



## **InduSoft Web Studio v6.1 + Service Pack 1** **Notes and Update Information**

### **Service Pack 1 for InduSoft Web Studio v6.1 (April 04, 2006)**

1. (DT - 1203): The Object Properties dialog window for the Command dynamic was modified in order to re-draw the label for the Command type (Open Screen, Close Screen, Toggle Tag, and so forth) properly when selecting different types for different events (On Open, On Close, and so forth).
2. (DT - 1204): Modified the grid interface from the Object Properties dialog window for the Command dynamic, to keep the focus on the grid interface when the user switches to a different cell by using the TAB key.
3. (DT - 1205): Modified the grid interface from the Object Properties dialog window for the Command dynamic, to avoid launching multiple warning messages (Invalid Tag) when using an invalid syntax in the Tag Name column.
4. (DT - 1207): Modified the Viewer module to display fill effects and screen borders properly when the Top and/or Left coordinates are configured with negative values.
5. (DT - 1208): Modified Studio to avoid incompatibility issues between the C50032.dll and StudioAdo.dll files and Windows NT operating system. The updated version of the product runs properly under Windows NT even when these files are installed.
6. (DT - 1209): Trend Control object was modified to draw the pens properly, even when using the embedded scroll bars for the X axis during the runtime.
7. (DT - 1210): Modified the Web Thin Client control (ISSymbol) to support tags with array size higher than 4096. The maximum array size supported by tags is 16384, as long as it does not exceed the maximum number of tags supported the license on the Server.
8. (DT - 1212): Modified the Studio ADO Gateway to avoid leaking of memory issues when closing sockets.
9. (DT - 1213): Implemented changes in the TCP/IP Server module to avoid leaking of memory when several Web Thin Clients are connected simultaneously and when the physical connection is interrupted.
10. (DT - 1214): The PrintWindow() function was modified to avoid errors when executing it without parameters (optional).
11. (DT - 1215): Modified Web Thin Client control (ISSymbol) to avoid displaying warning messages when the translation file is not found on the Server.
12. (DT - 1216): CEView was modified to avoid leaking of memory when switching screens with specific objects.
13. (DT - 1217): Modified CEView, allowing the user to start/stop each runtime tasks not only remotely by the Project Status dialog of the development environment, but also locally, by



double-clicking on the CEView icon located on the tray-bar. Furthermore, the StartTask(), EndTask() and IsTaskRunning() functions were modified to be supported by CEView.

14. (DT - 1218): Modified the Web Gateway for WinCE to release the socket for Web Thin Client stations that were physically disconnected. Moreover, the connection time-out time from 10 minutes to 1 minute. Therefore, if the Web Thin Client is not available for more than 1 minute, the server releases its socket and makes it available for other connections.
15. (DT - 1219): Modified the HST2TXT.EXE program to support history files (\*.HST), which have more than one date logged on them (e.g.: Batch files).
16. (DT - 1220): Created the option "Accept Tag Name in the Item column" for the OPC Client worksheets. When this option is checked, the user is able to configure tag names between curly brackets (e.g.: {MyTag}) in the Address column of the OPC Client worksheet. Therefore, the item names can be modified dynamically during the runtime, by changing the value of these tags. When this option is disabled, the curly brackets are treated as part of the item name.
17. (DT - 1221): Modified Trend object (legacy object) to display data properly even when retrieving history data stored in a SQL Relational Database and the period selected contains a daylight shift.
18. (DT - 1222): Modified the Trend Control object to avoid errors when configuring it in a screen with the "Hide" attribute enabled.
19. (DT - 1223): Increased the maximum number of built-in functions supported by the product from 256 to 2048.
20. (DT - 1224): Created the WebGetFile(strURL,strPath) built-in function.
21. (DT - 1226): Modified the Trend Control object to display on the development environment the correct number of points configured for it.
22. (DT - 1227): Modified the Open Polygon and Close Polygon objects to optimize the CPU usage when manipulating them during the runtime (e.g.: clicking on them).
23. (DT - 1228): Created the utility program TranslationUtil.exe, available at the \BIN sub-folder of Studio. This program reads the information from a translation file (Source) and generates a new file (Target), keeping the first column (original text) and using the longest text from all other columns in the second column (translation). This file is useful to test an application with the longest text from all languages available in the translation file. When executed, it launches a dialog where the user can specify the Source File, the Target File and the Font type used in the process.
24. (DT - 1229): Modified CEView to avoid displaying the warning message "TCP/IP Client Invalid Frame Number".
25. (DT - 1232): Modified CEView compiled for the SH3 processor type to support the image of WinCE devices designed on this platform.
26. (DT - 1234): Modified Remote Agent (CEServer.exe), which attempt to register EXE, DLL and OCX files automatically after downloading them to the Target Platform, when using the Send File commands from the Execution Environment. Furthermore, under WinCE, it also attempts to save the registry – based on settings configured in the CESERVER.INI - after downloading and



registering the files. Files under the \BIN and \DRV directory are not registered when using the Install System Files command.

27. (DT - 1235): Modified the Viewer module to avoid displaying question marks (???) when displaying the value of tag fields (e.g.: Min, Max, Unit) from tags whose quality is not GOOD.
28. (DT - 1236): Created the check-box "Display hidden properties" on the ActiveX Object Properties dialog (Configuration dialog), allowing the user to show or hide the ActiveX properties set with the attribute "hidden".
29. (DT - 1237): Modified the Translation Tool to treat Unicode text properly (2-bytes per character). Also, it was modified to allow the same text in more than one line, except in the first column of the translation file (Original Language).
30. (DT - 1238): Modified the LogOn() and LogOff() built-in functions to avoid overloading the CPU usage when executing them continuously (e.g.: in a loop).
31. (DT - 1239): Modified the Translation Tools Editor to avoid losing the first character on the first cell of the worksheet.
32. (DT - 1240): The Driver module was modified to support serial drivers configured with Connection Type = TCP/IP (encapsulate the serial protocol under TCP/IP), even when the communication driver works as a TCP/IP-based Server (receives connection from a remote TCP/IP-based Client). This problem would happen for MASTER Serial protocols encapsulated under TCP/IP only.
33. (DT - 1241): Modified Alarm/Event Control object to support large amount of data retrieved from the history files.
34. (DT - 1242): Modified Viewer module to load the Shared Image configured in the Screen Attributes dialog, even when the file extension .BMP) is not explicitly configured.
35. (DT - 1243): Modified the Smart Message object, configured with Type=Multistate Indicator, to display graphic images stored in the \Symbol sub-folder of the application, even when the path is not specified in the object configuration (only the file name is required).
36. (DT - 1244): Modified the TCP/IP Server module for CEView (PocketPC platform) to avoid errors when the client station disconnect from the Server by changing the Server IP Address configured on the TCP/IP Client worksheet during the runtime.
37. (DT - 1245): Modified Translation Editor to support Chinese characters properly.
38. (DT - 1246): Modified Translation Editor to keep compatibility with applications imported from older versions of the product.
39. (DT - 1247): Modified the Trend object (legacy) to work properly even when the Time Zone on the Web Thin Client station is different from the Time Zone on the Server station.
40. (DT - 1249): Modified text object to avoid becoming invisible when rotating it on the development interface.
41. (DT - 1250): Modified OPC Client module under Windows CE to avoid memory leaking issues when adding/removing items from specific OPC Servers.



- 42. (DT - 1251): Modified the Import Wizard for CX-Programmer in order to converter invalid tag names automatically to names supported by InduSoft Web Studio. When the tag begins with a number, an underline character ("\_") is added as prefix of the tag name. Also, when there is a period in the tag name, the underline character is used to replace the period.
- 43. (DT - 1252): Modified Web Thin Client control (ISSymbol) to avoid errors when the connection with the Server is interrupted.
- 44. (DT - 1253): Fixed the spelling error on the Project Settings (Translation Advanced Settings). The text "Ignore space chars at the end and BEGINNNG of the text" was replaced by "Ignore space chars at the end and BEGINNING of the text".
- 45. (DT – 1254): Modified Web Thin Client control (ISSymbol) to handle the date properly after using the SetDateFormat() function.
- 46. (DT - 1255): Modified the TCP/IP Client and TCP/IP Server modules to support the index 0 from array tags.
- 47. (DT - 1256): Created option "Disable TAB to navigate through cells" in the properties of the Grid object, allowing the user to disable/enable the navigation through the cells of the Grid object by using the TAB key, during the runtime.
- 48. (DT – 1258): Modified the Viewer module to keep the focus on the same object after switching the Viewer module to foreground (e.g.: using ALT+TAB).
- 49. (DT – 1259): Modified Web Thin Client control (ISSymbol) to look for the VK??.INI file(s) in the correct path and keep compatibility with previous versions of the product.
- 50. (DT – 1260): Modified Web Thin Client control (ISSymbol) to draw screen groups properly even when using the scroll bars of the Web Browser.
- 51. (DT – 1261): Modified the Screen Editor to avoid errors when opening the ActiveX Properties dialog window from specific controls continuously.
- 52. (DT – 1262): Modified the Main Driver Sheet from Communication Drivers to support tags between curly brackets in the Station field (e.g.: {StationTag}), allowing the user to change this settings during the runtime, by changing the tag value.
- 53. (DT – 1263): Trend Control object was modified to avoid errors when switching from a screen with the Alarm Control object to a screen with the Trend Control object.
- 54. (DT – 1264): Modified the Grid object to support the pipe character ("|") as separator when using Text File as Data Source.
- 55. (DT – 1266): Modified Studio to load all settings from the <ApplicationName>.APP file when switching from one application to other (File --> Open Project).
- 56. (DT – 1267): Increased the robustness of the built-in Security System of the Remote Agent v5.1 (CEServer.exe).
- 57. (DT – 1268): Suppressed the warning message “an unsupported operation was attempted” when configuring an invalid tag name in the Tag field of the Check-box object.



58. (DT – 1269): Modified Trend object (legacy object) to display data properly on the Web Thin Client (ISSymbol) when retrieving data from the history files in Online mode.
59. (DT – 1270): Created the optional parameter "optRunFromServer" for the GetLine() function, allowing it to access files stored on the Server when executed on the Web Thin Client (ISSymbol).
60. (DT – 1271): Modified the GetLine() function to read data from a specified line, as follows:  
When the second parameter is a numeric value, it indicates the number of the line from the text file. When the second parameter is a string value, it indicates a sequence of characters from the text file.
61. (DT – 1273): Enhanced the "InduSoft Import Tool for PanelBuilder" to support bitmaps configured on PushButton objects.
62. (DT – 1274): Modified Web Thin Client control (ISSymbol) to avoid errors when closing a screen with the Grid object configured with Class Tag as Data Source.
63. (DT – 1275): Created message to warn the user that he cannot modify the settings in the "Project Settings --> Options" interface when the runtime tasks are running.
64. (DT – 1276): Created a default built-in Virtual Keyboard (in English), which is used if the VK??.INI file is not found.
65. (DT – 1277): Modified VBScript interface to support the Min and Max fields (e.g.: \$TagName->Min, \$TagName->Max).
66. (DT – 1278): Enhancements regarding requirements for FDA 21 CFR – Part 11:
  - Created "Auto Log off" feature to log off the current user automatically after a period of time with no interaction with the application (keyboard and/or mouse actions).
  - Created option to force the user to configure a new password different from the current password.
  - Created option to encrypt the Alarm/Event history files.
  - Created built-in function GetUserPWDAging( strUser ) that returns the time left before expiring the current password for the strUser user name.
67. (DT – 1279): Modified the Communication Parameters for the Drivers, avoiding overloading the CPU usage when configuring specific modems.
68. (DT – 1280): Modified the Communication Parameters for the Drivers, avoiding errors when opening and closing this dialog continuously several times.
69. (DT – 1281): Modified the Replace dialog from the Object Properties interface (development environment) to support the following options: Tag Only, Tags + Properties or Custom Properties.
70. (DT – 1282): Created the LINKED SYMBOL interface, which allows the user to create a Master Symbol and link it to objects configured on the screens. When the Master is modified, the objects linked to the Master heritages the changes.
71. (DT – 1283): The TCP/IP Server module was modified to increase its performance and reliability.



72. (DT – 1284): Created the Task Toolkit Web Service (StudioWebService), which provides interface to the tags database of the Studio application.
73. (DT – 1285): Created option to modify the default path for new projects - section [OEM], parameter "UseUserFolder" parameter. When this parameter is set with the value "0", the default path for new projects is the \Projects sub-folder of the product path. When this parameter is set with the value "1", the default path for new projects is the My Documents\<Product Projects>\ sub-folder of the current user logged on the system.
74. (DT – 1286): Modified the Alarm module of CEView to avoid errors when saving a large amount of data to history files under Windows CE operating system.
75. (DT – 1287): Modified CEView to avoid errors when calling the LogOn() function with an invalid password configured in the second parameter of the function.
76. (DT – 1289): Suppressed the PServer warning message, which was launched when printing text files.
77. (DT – 1290): Modified the Trend Control object to avoid errors when overflowing an internal buffer for data plotting. Also, modified the legend to display the text "Overflow +" or "Overflow -" when the point value is "infinite" (data limits) and the text "Open TC" when the point value is a NaN (Not A Number).
78. (DT – 1291): Created the following enhancements for the Trend Control object:
  - Allow the user to configure a tag between curly brackets in the fields to define the number of decimal points for the X and/or Y axis.
  - Created the "Auto" type for the Period of the X axis.
  - Created support for Tooltips option for the icons in the built-in toolbar.
  - Created progress bar when retrieving data from the history.
  - Created advanced option "Retrieve bounding samples".
79. (DT – 1292): Modified the Trend Control to retrieve data properly from the SQL Relational Database when configuring Class Tags in the Trend group.
80. (DT – 1293): Modified Trend object (legacy object) to display data properly when modifying the date format with the SetDateFormat() built-in function.
81. (DT – 1294): Increased the performance of the Trend Control object when retrieving data from large SQL Relational Databases.
82. (DT – 1295): Modified the Grid object to hide the columns whose label is a null value (""). In this case, the width of the column is set to 0 automatically, allowing the user to show/hide columns dynamically during the runtime when configuring tags between curly brackets in the Label field of the object.
83. (DT – 1296): Modified Web Thin Client control (ISSymbol) to increase the performance when connecting to the Server and when switching screens.
84. (DT – 1297): Modified Remote Agent (CEServer.exe) to support Watch-dog settings, configurable by the CEServer.ini.





85. (DT – 1248, 1257, 1288): Enhanced the following communication drivers: KOYO, SIETH and SRTP.

## **InduSoft Web Studio v6.1 (August 26, 2005)**

1. (DT – 72): Created Trend Control object.
2. (DT – 169): Integrated standard VBScript interface in the product.
3. (DT – 312): The Log On embedded dialog window is sensitive to translation during the runtime.
4. (DT – 328): Enhanced the Translation Tool interface: Link available in the Workspace; Unified CSV-based translation file; Option to ignore spaces at the beginning/ending of the texts; Option to refresh the translation sheet automatically with the text from the application.
5. (DT – 418): Modified the Smart Message dialogs to make sure that the messages edited are not lost when pressing the OK button on the development environment.
6. (DT – 419): Modified the Application Tags Database sheet to make sure that the new values entered in the sheet are not lost when clicking on the slider bar.
7. (DT – 539): Created option allowing the user to define the default position to open the Virtual Keyboard during the runtime.
8. (DT – 564): Modified the Test Display algorithm to avoid modified the settings of the objects when executing the test.
9. (DT – 571): Enable the “External Translation” option by default for the following objects: Combo-box, List-box and Smart Message. Furthermore, the “Translation Tool” must be enabled by default for new projects.
10. (DT – 710): Modified the grid interfaces from the development environment (worksheets and dialogs) to follow the same standards, based on Microsoft Excel.
11. (DT – 725): Modified Web Thin Client control (ISSymbol) to handle properly the history trend files saved in the proprietary compressed format.
12. (DT – 726): Modified the Trend task to avoid errors when uncompressing history trend files from groups higher than 255.
13. (DT – 732): Enhanced the Application Tags Database sheets: Allow the user show/hide additional columns for each property of the tags; Allow the user to sort the information on the sheet; Allow the user to edit the data on the sheet in a more efficient way.
14. (DT – 733): Modified the CEView runtime to make sure that users without the proper rights configured in the Security System be able to open screens during the runtime.
15. (DT – 734): Modified CEView to avoid freezing the runtime when attempting to open a popup/dialog screen from another popup/dialog screen.



16. (DT – 765): Modified Web Thin Client control (ISSymbol) to avoid errors when opening screens under Microsoft Windows 98 operating system.
17. (DT – 775): Modified the screen editor to avoid hiding the mouse cursor when editing fields from the Object Properties dialog window.
18. (DT – 797): Enhanced the CNFEmail() function to support SMTP Servers that require authentication.
19. (DT – 821): Enhanced the warning messages launched when the license is not found or invalid, providing specific information about why the license is not valid.
20. (DT – 841): Enhanced the Web Thin Client control (ISSymbol) to support Hexa and Binary data format on the Text I/O dynamic.
21. (DT – 842): Enhanced the Grid object, allowing the user to configure the columns for the object (label, type, width, input enabled and so forth) when the Data Source is set to Class Tag.
22. (DT – 852): Created the InduSoft Import Tool for PanelMate Plus.
23. (DT – 864): Modified screen editor for avoid corrupting screens when moving several bitmap objects on the screen and saving it.
24. (DT – 866): Enhanced the Licensing Method for Studio, supporting additional scenarios.
25. (DT – 867): Modified the TCP/IP libraries for the communication drivers to avoid errors when connecting to remote devices.
26. (DT – 876): Created the GetScrInfo() function, which returns the coordinates of an open screen.
27. (DT – 878): Enhanced the development environment to handle all documents (screens and worksheets) in tags, instead of windows. Furthermore, it was created the “Lay-out” tab, which allows the user to visualize or design the position of the screens – including group of screens and popup/dialog screens.
28. (DT – 896): Increased the performance from the TCP/IP Server when updating the tags configured on the Web Thin Client screens.
29. (DT – 897): Modified Web Thin Client control (ISSymbol) to handle the date properly on the Trend object, even after changing the date format during the runtime, by the SetDateFormat() function.
30. (DT - 901): Modified the algorithm to control the Evaluation Mode.
31. (DT - 902): Modified the Evaluation Mode to allow the user to run the runtime tasks for no more than 2 continuous hours.
32. (DT - 903): Modified the OPC Interface to provide browsing capabilities to class tags even when using data type filtering.
33. (DT - 905): Modified the Text object to keep the correct alignment after translating the text during the runtime.





- 34. (DT - 906): Enhanced the Import Wizard for InduSoft Web Studio Database in order to support not only tags but also other components from the application. This option can be used, for instance, to import Template applications into the current application.
- 35. (DT - 908): Modified Viewer module to make sure that popup/dialog screens are always open in foreground.
- 36. (DT - 910): Enhanced the Color dynamic to support a tag/expression that returns the RGB code which will determine the color which must be applied to the object during the runtime.
- 37. (DT - 911): Created the RGB2Number() and Number2RGB() functions to manipulate colors based on their RGB codes.
- 38. (DT - 912): Enhanced the Ellipse object to support Start Angle and End Angle properties. Using these options, the user can create pie-slice graphs and/or arcs.
- 39. (DT - 913): Create the "Text File" Data Source option for the Smart Message object. Using this configuration, the object can display messages configured in an external text file.
- 40. (DT - 914): Modified Remote Agent module (CEServer.exe) to support serial communication properly when running under Microsoft Windows NT/2K/XP.
- 41. (DT - 918): Enhanced the Grid Control object to support wildcards when filtering data from any data source.
- 42. (DT - 919): Modified the Command dynamic to behave properly when applied to button objects which are pressed continuously during the runtime, under Microsoft Windows CE operating system.
- 43. (DT - 920): Solved memory leaking issue when exchanging string values through the OPC Server module.
- 44. (DT - 922): Created interface that allows creating different languages supported by the Virtual Keyboards by editing a text file (VK.INI).
- 45. (DT - 923): Enhanced the OPC Client worksheet, allowing the user to configure tags between curly brackets in the Item field. Using this feature, the OPC Server item names can be modified during the runtime (on-the-fly) by the application itself.
- 46. (DT - 924): Modified the Alarm/Event Control object to display a large amount of data properly.
- 47. (DT - 926): Enhanced the Recipe worksheet to support tags in the Number of Elements field.
- 48. (DT - 927): Modified Register module to recognize licenses issues for the CEView PRO Product Type.
- 49. (DT - 936): Modified Verify Application algorithm to convert rectangle objects created with IWS v1.x properly to IWSv6.0.
- 50. (DT - 937): Modified screen editor to avoid error when applying Italic effect to an empty Text object (null caption).
- 51. (DT - 938): Modified the Install Wizard to avoid resetting the Evaluation Mode remaining time after installing the product.



- 52. (DT - 939): Modified CEView to avoid leaking of memory when connecting to remote Web Thin Clients.
- 53. (DT - 940): Modified Studio to avoid incompatibility issues with the DB2 database from IBM.
- 54. (DT - 941): Enhanced the Grid control object to support input of values by the tags configured in the Selected Values from the object properties interface.
- 55. (DT - 944): Modified the behavior of the focus applied to the Object Properties window when using the screen editor to increase the productivity when editing screens.
- 56. (DT - 947): Modified the screen editor allowing the user to edit screens with ActiveX controls which are not registered in the local computer.
- 57. (DT - 950): Created a new option for the Grid control object, allowing the user to disable the TAB key to navigate through its cells during the runtime.
- 58. (DT - 951): Modified the OPC Browser dialog window from the OPC Client sheet, allowing the user to browse items keeping the dialog open to increase the productivity.
- 59. (DT - 953): Enhanced the Command dynamic: Improved the Object Properties interface to use tabs instead of combo-box to select the events; Created new types of actions (Built-in Language, VBScript, Open Screen, Close Screen, Set Tag, Reset Tag and Toggle Tag).
- 60. (DT - 954): Create command in the Tools menu bar to reset the Tags Database – this command will reset all tags from the application and load their startup values when applicable. Furthermore, it was created an option in the Project Settings - Preferences dialog to execute this command automatically whenever the application is executed by the Run Application command from the development environment.
- 61. (DT - 955): Modified interface to insert ActiveX objects in the screens to list all controls registered in the local computer.
- 62. (DT - 956): Modified the Trend task to support the Dead-band values configured in the Trend worksheets.
- 63. (DT - 957): Created option in the <Application>.APP file to configure the DDE Client module to support ANSI DDE Servers (in addition to UNICODE DDE Servers – default).
- 64. (DT - 958): Enhanced the CEView product, allowing the user to start/stop each task individually.
- 65. (DT - 963): Modified Import Wizard for OMRON CX-Programmer Database in order to use default values for Station.
- 66. (DT – 269, 791, 855, 856, 870, 873, 959, 960, 962): Enhanced the following communication drivers: MATSU, ABCIP, AGRI, ABENI, MPI, EXFO, FANUC, TWCAT and OMRON.
- 67. (DT – 796, 899): Created the following communication drivers: T4, MX100.