



InduSoft CNF Files

Description and Standard Syntax of the Configuration Files Created by STUDIO

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I. Introduction

This document describes the format of the text files created by STUDIO when configuring an application. The screen files (*.SCR or *.SCC), compiled maths (*.MAC) and any other binary file (*.BIN) are not text files, therefore are not described in this document.

➔ **Caution:** The format of any file described in this document can be modified in upgraded versions of STUDIO without any formal warning from the software manufacturer.

II. Database Files (\<ApplicationPath>\Database)

II.1. TAGL.TXT - Application Tags Database

▪ Standard Syntax for each tag

```
// X.Y - Application Tags
#T1 | T2 | T3 | T4 | T5 | T6 | T7 | T8 | T9 |
#Parameters
<[P1] . P2> | P3 | P4 | P5 | P6 | P7 | P8 | P9 | P10 | P11 | P12 | P13 |
#Alarm
<[A1] . A2> | A3 | A4 | A5 | A6 | A7 | A8 | A9 | A10 | A11 | A12 | A13 | A14 | A15 | A16 | A17 | A18 | A19 | A20 |
#History
<[H1] . H2> | H3 | H4 | H5 | H6 |
#ItemParameters
<[I1] . I2> | I3 | I4 |
```

▪ Tag Properties:

T1 = Position of the tag in the Tags Datasheet View (line number)
T2 = Tag Name
T3 = Tag Size
T4 = Tag Type (0=Boolean; 1=Integer; 2=Real; 3=String; 4..n=Class)
T5 = Class Name
T6 = Description
T7 = Web Data type (0=Local; 1=Server)
T8 = Tag Integration Imported (0=Not Imported; 1=Imported)
T9 = Tag Integration Tag Source Name

▪ Parameters:

P1 = Constant Value (value = 0)
P2 = Class Member Name (only for Class Tag)
P3 = Version of the syntax for the Parameters (current value = 1)
P4 = Retentive Value (1=Enabled; 0=Disabled)
P5 = Retentive Parameters (1=Enabled; 0=Disabled)
P6 = Dead Band (1=Enabled; 0=Disabled)
P7 = Smoothing (1=Enabled; 0=Disabled)
P8 = Dead Band Value
P9 = Min. Value
P10 = Max. Value
P11 = Unit
P12 = Startup Value
P13 = Communication URL

▪ Alarm Properties:

A1 = Array Index
A2 = Class Member Name (only for Class Tag)
A3 = Version of the syntax for the Alarm Properties (current value = 2)
A4 = Translation (1=Enabled; 0=Disabled)
A5 = Constant Value (value=1)
A6 = Dead Band Value
A7 = Deviation Dead Band

A8 = Deviation Set Point
A9 = Remote Ack Tag
A10 =MnemonicOFF
A11 =MnemonicON
A12 =MnemonicAck
A13 = Amount of Alarm Messages
A14 = Alarm Type (1=HiHi; 2=Hi/On; 4=Lo/Off; 8=LoLo; 16=Rate/Changed; 32=Deviation+; 64=Deviation-)
A15 = Rate Unit (0=1/sec; 1=1/min; 2=1/hor)
A16 = Group Number
A17 = Priority
A18 = Message
A19 = Selection
A20 = Limit

▪ **History Properties:**

H1 = Array Index
H2 = Class Member Name (only for Class Tag)
H3 = Version of the syntax for the History Properties (current value = 1)
H4 = Constant Value (value=1)
H5 = Group Number
H6 = Log Dead Band

▪ **Item Parameters:**

I1 = Array Index
I2 = Class Member Name (only for Class Tag)
I3 = Version of the syntax for the History Properties (current value = 1)
I4 = Constant Value (value=1)

 **Notes:**

- The first line of the *Application Tags Database* file must begin with the chars //. The text besides these chars can be any comment. Usually, this text is X.Y - Application Tags, where X.Y is the product version.
- The parameters **A11** ... **A17** must be repeated in the same line for each alarm type configured for the same tag.
- The text **.P2** , **.A2** and **.H2** must be omitted for single tags (non-class tags)

III. Tasks Configuration Files (\<ApplicationPath>\Config)

III.I. ALARM???.ALR - Alarm Worksheet

▪ Standard Syntax

```
H1  
alarm  
H2 | H3  
H4  
SH5  
RH6  
RH7  
RH8  
RH9  
RH10  
RH11  
TH12  
TH13  
TH14  
TH15  
RH16  
RH17  
RH18  
FH19  
FH20  
FH21  
FH22  
FH23  
FH24  
B1GB2 RB3 FB4 SB5 IB6 SB7  
GB8 RB9 FB10 SB11 IB12 SB13
```

▪ Worksheet Header

H1 = Text configured in the *Description* field
H2 = Version of the file syntax (current value = 0)
H3 = Access Level for the Security System
H4 = Number of lines configured in the body of the *Alarm* worksheet
H5 = Text configured in the *Group Name* field
H6 = *Beep* checkbox (0=Unchecked; 1=Checked)
H7 = *Save To Disk* checkbox (0=Unchecked; 1=Checked)
H8 = *Summary* checkbox (0=Unchecked; 1=Checked)
H9 = *To Printer* checkbox (0=Unchecked; 1=Checked)
H10 = *Generate Ack Messages* checkbox (0=Unchecked; 1=Checked)
H11 = *Generate Norm Messages* checkbox (0=Unchecked; 1=Checked)
H12 = Tag configured in the *Total Active* field
H13 = Tag configured in the *Total Active or Unack* field
H14 = Tag configured in the *Disable* field
H15 = Tag configured in the *Remote Ack* field

H16 = *Ack* checkbox (0=Unchecked; 1=Checked)
H17 = *Enable* checkbox for custom colors (0=Checked; 1=Unchecked)
H18 = *Enable* checkbox for custom colors (0=Unchecked; 1=Checked)
H19 = Foreground color for message in the *Start* status
H20 = Background color for message in the *Start* status
H21 = Foreground color for message in the *Ack* status
H22 = Background color for message in the *Ack* status
H23 = Foreground color for message in the *Norm* status
H24 = Background color for message in the *Norm* status

▪ **Worksheet Body**

B1 = Constant character (ASCII code = 12)
B2 = *Tag Name* configured in the line 1
B3 = *Type* configured in the line 1 (0=High; 1=Hi; 2=Lo; 3=Lolo; 4=Rate; 5=Dev+; 6=Dev-)
B4 = *Limit* configured in the line 1
B5 = *Message* configured in the line 1
B6 = *Priority* configured in the line 1
B7 = *Selection* configured in the line 1
B8 = *Tag Name* configured in the line 2
B9 = *Type* configured in the line 2 (0=HiHi; 1=Hi; 2=Lo; 3=LoLo; 4=Rate; 5=Dev+; 6=Dev-)
B10 = *Limit* configured in the line 2
B11 = *Message* configured in the line 2
B12 = *Priority* configured in the line 2
B13 = *Selection* configured in the line 2

 **Notes:**

- The TAB char must be used between the *Tag Name* (for example: **B2**), the *Type* (for example: **B3**), the *Limit* (for example: **B4**), the *Message* (for example: **B5**), the *Priority* (for example: **B6**) and the *Selection* (for example: **B7**).
- The syntax **G**B8 **R**B9 **F**B10 **S**B11 **I**B12 **S**B13 is used for each line configured in the body of the *Alarm* worksheet.

III.2. TREND???.TRD - Trend Worksheet

▪ Standard Syntax

```
H1  
trend  
H2 | H3  
H4  
RH5  
RH6  
TH7  
IH8  
TH9  
RH10  
RH11  
SH12  
B1GB2 FB3  
GB4 FB5
```

▪ Worksheet Header

H1 = Text configured in the *Description* field
H2 = Version of the file syntax (current value = 0)
H3 = Access Level for the Security System
H4 = Number of lines configured in the body of the *Trend* worksheet
H5 = *Save On Trigger* checkbox (0=Unchecked; 1=Checked)
H6 = *Save on Tag Change* checkbox (0=Unchecked; 1=Checked)
H7 = Tag configured in the *Disable* field
H8 = Value configured in the *File Life Time (days)* field
H9 = Tag configured in the *Save On Trigger* field
H10 = *Date (Default)* checkbox (0=Unchecked; 1=Checked)
H11 = *Batch* checkbox (0=Unchecked; 1=Checked)
H12 = Text configured in the *Batch* field

▪ Worksheet Body

B1 = Constant character (ASCII code = 12)
B2 = *Tag Name* configured in the line 1
B3 = *Dead Band* configured in the line 1
B4 = *Tag Name* configured in the line 2
B5 = *Dead Band* configured in the line 2

🔗 Notes:

- The TAB char must be used between the *Tag Name* (for example: **B2**) and the *Dead Band* (for example: **B3**).
- The syntax **GB4 FB5** is used for each line configured in the body of the *Trend* worksheet.

III.3. <RecipeName>.RCP - Recipe Worksheet

- **Standard Syntax**

```
H1
*
H2 | H3
H4
S H5
R
T H6
R H7
B1 T B2 I B3
T B4 I B5
```

- **Worksheet Header**

H1 = Text configured in the *Description* field
H2 = Version of the file syntax (current value = 0)
H3 = Access Level for the Security System
H4 = Number of lines configured in the body of the *Recipe* worksheet
H5 = Text configured in the *File Name* field
H6 = Text configured in the *Register Number* field
H7 = *Save As XML* checkbox (0=Unchecked; 1=Checked)

- **Worksheet Body**

B1 = Constant character (ASCII code = 12)
B2 = *Tag Name* configured in the line 1
B3 = *Number of Elements* configured in the line 1
B4 = *Tag Name* configured in the line 2
B5 = *Number of Elements* configured in the line 2

- **Notes:**

- The TAB char must be used between the *Tag Name* (for example: **B2**) and the *Number of Elements* (for example: **B3**).
- The syntax T **B4** I **B5** is used for each line configured in the body of the *Recipe* worksheet.

III.4. <ReportName>.REP - Report Worksheet

- **Standard Syntax**

H1
*
H2 | H3
H4
RH5
SH6
RH7
B1

- **Worksheet Header**

H1 = Text configured in the *Description* field
H2 = Version of the file syntax (current value = 0)
H3 = Access Level for the Security System
H4 = Constant Value (value=0)
H5 = *Disk Append* checkbox (0=Unchecked; 1=Checked)
H6 = Text configured in the *Output File* field
H7 = *Unicode* checkbox (0=Unchecked; 1=Checked)

- **Worksheet Body**

B1 = Constant character (ASCII code = 12)

 **Notes:**

- The text typed in the body of the *Report* worksheet (text format) is saved in another file with extension TXT (for example: Report1.TXT).
- The text typed in the *Report Writer* (RTF format) is saved in another file with extension RTF (for example: Report1.RTF).

III.5. ODBC???.DBC - ODBC Worksheet

- Standard Syntax

H1
ODBC
H2 | H3
H4
SH5
SH6
SH7
SH8
TH9
TH10
TH11
TH12
TH13
SH14
TH15
TH16
B1TB2 SB3
TB4 SB5

- Worksheet Header

H1 = Text configured in the *Description* field
H2 = Version of the file syntax (current value = 0)
H3 = Access Level for the Security System
H4 = Number of lines configured in the body of the *ODBC* worksheet
H5 = Text configured in the *Data Source* field
H6 = Text configured in the *User* field
H7 = Text configured in the *Password* field
H8 = Text configured in the *Table* field
H9 = Tag configured in the *Select* field
H10 = Tag configured in the *Next* field
H11 = Tag configured in the *Insert* field
H12 = Tag configured in the *Update Trigger* field
H13 = Tag configured in the *Delete* field
H14 = Text configured in the *Condition* field
H15 = Tag configured in the *Status* field
H16 = Tag configured in the *Transaction* field

- Worksheet Body

B1 = Constant character (ASCII code = 12)
B2 = *Tag Name* configured in the line 1
B3 = *Column* configured in the line 1
B4 = *Tag Name* configured in the line 2
B5 = *Column* configured in the line 2

 **Notes:**

- The TAB char must be used between the *Tag Name* (for example: **B2**) and the *Column* (for example: **B3**).
- The syntax **TB4 SB5** is used for each line configured in the body of the *ODBC* worksheet.

III.6. MATH???.MAT - Math Worksheet

- **Standard Syntax**

```
H1  
math  
H2 | H3  
H4  
EH5  
B1TB2 EB3  
TB4 EB5
```

- **Worksheet Header**

H1 = Text configured in the *Description* field
H2 = Version of the file syntax (current value = 0)
H3 = Access Level for the Security System
H4 = Number of lines configured in the body of the *Math* worksheet
H5 = Value configured in the *Execution* field

- **Worksheet Body**

B1 = Constant character (ASCII code = 12)
B2 = *Tag Name* configured in the line 1
B3 = *Expression* configured in the line 1
B4 = *Tag Name* configured in the line 2
B5 = *Expression* configured in the line 2

- **Notes:**

- The TAB char must be used between the *Tag Name* (for example: **B2**) and the *Expression* (for example: **B3**).
- The syntax **TB4 EB5** is used for each line configured in the body of the *Math* worksheet.

III.7. SCHED???.SCH - Scheduler Worksheet

Standard Syntax

```
H1  
sched  
H2 | H3  
H4  
B1R B2 T B3 M B4 D B5 T B6 e B7 e B8  
R B9 T B10 M B11 D B12 T B13 e B14 e B15
```

Worksheet Header

- H1 = Text configured in the *Description* field
- H2 = Version of the file syntax (current value = 0)
- H3 = Access Level for the Security System
- H4 = Number of lines configured in the body of the *Scheduler* worksheet

Worksheet Body

- B1 = Constant character (ASCII code = 12)
- B2 = *Event* configured in the line 1 (0=Calendar; 1=Clock; 2=Change)
- B3 = *Trigger* configured in the line 1
- B4 = *Time* configured in the line 1 (HH:MM:SS)
- B5 = *Date* configured in the line 1 (MM:DD:YYYY)
- B6 = *Tag* configured in the line 1
- B7 = *Expression* configured in the line 1
- B8 = *Disable* configured in the line 1
- B9 = *Event* configured in the line 2 (0=Calendar; 1=Clock; 2=Change)
- B10 = *Trigger* configured in the line 2
- B11 = *Time* configured in the line 2 (HH:MM:SS)
- B12 = *Date* configured in the line 2 (MM:DD:YYYY)
- B13 = *Tag* configured in the line 2
- B14 = *Expression* configured in the line 2
- B15 = *Disable* configured in the line 2

Notes:

- The TAB char must be used between the *Event* (for example: B2), the *Trigger* (for example: B3), the *Time* (for example: B4), the *Date* (for example: B5), the *Tag* (for example: B6), the *Expression* (for example: B7) and the *Disable* (for example: B8).
- The syntax R B9 T B10 M B11 D B12 T B13 e B14 e B15 is used for each line configured in the body of the *Scheduler* worksheet.

III.8. <DriverName>???.DRV – Standard Driver Worksheet

▪ Standard Syntax

```
H1
H2
H3 | H4
H5
TH6
VH7
TH8
TH9
TH10
VH11
TH12
TH13
SH14
SH15
IH16
IH17
FH18
FH19
B1TB2 BB3 FB4 FB5
TB6 BB7 FB8 FB9
```

▪ Worksheet Header

H1 = Text configured in the *Description* field
H2 = Driver Name (for example: ABKE)
H3 = Version of the file syntax (current value = 0)
H4 = Access Level for the Security System
H5 = Number of lines configured in the body of the *Standard Driver* worksheet
H6 = Tag configured in the *Read Trigger* field
H7 = Value configured in the *Enable Read When Idle* field
H8 = Tag configured in the *Read Completed* field
H9 = Tag configured in the *Read Status* field
H10 = Tag configured in the *Write Trigger* field
H11 = Value configured in the *Write on Tag Change* field
H12 = Value configured in the *Write Completed* field
H13 = Tag configured in the *Write Status* field
H14 = Text configured in the *Station* field
H15 = Text configured in the *Header* field
H16 = *Increase priority* checkbox (0=Unchecked; 1=Checked)
H17 = *Min/Max* checkbox (0=Unchecked; 1=Checked)
H18 = Value configured in the *Min* field
H19 = Value configured in the *Max* field

▪ Worksheet Body

B1 = Constant character (ASCII code = 12)
B2 = *Tag Name* configured in the line 1
B3 = *Address* configured in the line 1
B4 = *Div/Min* configured in the line 1
B5 = *Add/Max* configured in the line 1

B6 = *Tag Name* configured in the line 2
B7 = *Address* configured in the line 2
B8 = *Div/Min* configured in the line 2
B9 = *Add/Max* configured in the line 2

 **Notes:**

- The TAB char must be used between the *Tag Name* (for example: **B2**), the *Address* (for example: **B3**), the *Div/Min* (for example: **B4**) and the *Add/Max* (for example: **B5**).
- The syntax **T****B6** **B****B7** **F****B8** **F****B9** is used for each line configured in the body of the *Standard Driver* worksheet.

III.9. <DriverName>.MDV – Main Driver Worksheet (used by the editor)

▪ Standard Syntax

```
H1
H2
H3 | H4
H5
EH6
TH7
TH8
TH9
TH10
IH11
FH12
FH13
B1TB2 SB3 BB4 RB5 RB6 FB7 FB8
TB9 SB10 BB11 RB12 RB13 FB14 FB15
```

▪ Worksheet Header

H1 = Text configured in the *Description* field
H2 = Driver Name (for example: ABKE)
H3 = Version of the file syntax (current value = 0)
H4 = Access Level for the Security System
H5 = Number of lines configured in the body of the *Main Driver* worksheet
H6 = Tag/Expression configured in the *Disable* field
H7 = Tag configured in the *Read Completed* field
H8 = Tag configured in the *Read Status* field
H9 = Value configured in the *Write Completed* field
H10 = Tag configured in the *Write Status* field
H11 = *Min/Max* checkbox (0=Unchecked; 1=Checked)
H12 = Value configured in the *Min* field
H13 = Value configured in the *Max* field

▪ Worksheet Body

B1 = Constant character (ASCII code = 12)
B2 = *Tag Name* configured in the line 1
B3 = *Station* configured in the line 1
B4 = *Address* configured in the line 1
B5 = *Action* (0=Read, 1=Write, 2=Read+Write) configured in the line 1
B6 = *Scan* (0=Screen, 1=Always, 2=Auto) configured in the line 1
B7 = *Div/Min* configured in the line 1
B8 = *Add/Max* configured in the line 1
B9 = *Tag Name* configured in the line 2
B10 = *Station* configured in the line 2
B11 = *Address* configured in the line 2
B12 = *Action* (0=Read, 1=Write, 2=Read+Write) configured in the line 2
B13 = *Scan* (0=Screen, 1=Always, 2=Auto) configured in the line 2
B14 = *Div/Min* configured in the line 2
B15 = *Add/Max* configured in the line 2

 **Notes:**

- The TAB char must be used between the *Tag Name* (for example: **B2**), the *Station* (for example: **B3**), the *Address* (for example: **B4**), the *Action* (for example: **B5**), the *Scan* (for example: **B6**), the *Div/Min* (for example: **B7**) and the *Add/Max* (for example: **B8**).
- The syntax **TB9 SB10 BB11 RB12 RB13 FB14 FB15** is used for each line configured in the body of the *Main Driver* worksheet.
- The <DriverName>.MDV file is used by the driver sheet editor (development environment) – not by the runtime. It is necessary to create a <DriverName>.SDV with a different syntax for the runtime.

III.10. <DriverName>.SDV – Main Driver Worksheet (used by the runtime)

Standard Syntax

H1							
H2							
H3							
H4							
H5							
H6							
H7							
H8							
H9							
H10							
H11							
B1	B2	B3	B4	B5	B6	B7	

Worksheet Header

- H1 = Version of the file syntax (current value = 1)
- H2 = Text configured in the *Description* field
- H3 = Tag/Expression configured in the *Disable* field
- H4 = Tag configured in the *Read Completed* field
- H5 = Tag configured in the *Read Status* field
- H6 = Value configured in the *Write Completed* field
- H7 = Tag configured in the *Write Status* field
- H8 = *Min/Max* checkbox (0=Unchecked; 1=Checked)
- H9 = Value configured in the *Min* field
- H10= Value configured in the *Max* field
- H11= Number of lines configured in the body of the *Main Driver* worksheet

Worksheet Body

- B1 = *Tag Name* configured in the line 1
- B2 = *Station* configured in the line 1
- B3 = *Address* configured in the line 1
- B4 = *Action* (0=Read, 1=Write, 2=Read+Write) configured in the line 1
- B5 = *Scan* (0=Screen, 1=Always, 2=Auto) configured in the line 1
- B6 = *Div/Min* configured in the line 1
- B7 = *Add/Max* configured in the line 1

Notes:

- The TAB char must be used between the *Tag Name* (for example: **B1**), the *Station* (for example: **B2**), the *Address* (for example: **B3**), the *Action* (for example: **B4**), the *Scan* (for example: **B5**), the *Div/Min* (for example: **B6**) and the *Add/Max* (for example: **B7**).
- The syntax **B1 B2 B3 B4 B5 B6 B7** is used for each line configured in the body of the *Main Driver* worksheet.
- The <DriverName>.SDV file is used by the driver runtime – not by the development environment. It is necessary to create a <DriverName>.MDV with a different syntax for the development environment.
- The data in the <DriverName>.SDV must be sorted (by Station, and then by Address), unless you configure the following setting in the <ApplicationName>.APP file:
[Options]
UnsortedSDV=1

III.11. OPCCL???.OPC - OPC Client Worksheet

▪ Standard Syntax

```
H1
OpcCl
H2|H3
H4
SH5
VH6
VH7
VH8
TH9
SH10
IH11
I
R
R
R
R
R
R
R
R
T
T
T
R
R
F255.000000
F16777215.000000
F65280.000000
F16777215.000000
F16711680.000000
F16777215.000000
IH12
IH13
B1TB2 SB3 RB4 FB5 FB6
TB7 SB8 RB9 FB10 FB11
```

▪ Worksheet Header

- H1 = Text configured in the *Description* field
- H2 = Version of the file syntax (current value = 0)
- H3 = Access Level for the Security System
- H4 = Number of lines configured in the body of the *OPC Client* worksheet
- H5 = Server Identifier Name
- H6 = Tag name configured in the *Disable* field
- H7 = Value configured in the *Update Rate (ms)* field
- H8 = Value configured in the *Percent Deadband* field
- H9 = Tag configured in the *Status* field
- H10 = Text configured in the *Remote Server Name* field
- H11 = Read after writing (0=Unchecked; 1=Checked)
- H12 = Accept TagName in the Item columns (1=Unchecked; 2=Checked)
- H13 = Read before writing (0=Unchecked; 1=Checked)

▪ **Worksheet Body**

- B1** = Constant character (ASCII code = 12)
- B2** = *Tag Name* configured in the line 1
- B3** = *Item* configured in the line 1
- B4** = *Scan* selected in the line 1 (0=Always; 1=Screen)
- B5** = *Div factor*
- B6** = *Add factor*
- B7** = *Tag Name* configured in the line 2
- B8** = *Item* configured in the line 2
- B9** = *Scan* selected in the line 2 (0=Always; 1=Screen)
- B10** = *Div factor*
- B11** = *Add factor*

 **Notes:**

- The TAB char must be used between the *Tag Name* (for example: **B2**), the *Item* (for example: **B3**) and the *Scan* (for example: **B4**).
- The syntax **TB7** **SB8** **RB9** **FB10** **FB11** is used for each line configured in the body of the *OPC Client* worksheet.

III.12. TCPCL???.TCP - TCP/IP Client Worksheet

- **Standard Syntax**

```
H1
TCPCL
H2 | H3
H4
TH5
SH6
B1TB2 SB3
TB4 SB5
```

- **Worksheet Header**

- H1** = Text configured in the *Description* field
- H2** = Version of the file syntax (current value = 0)
- H3** = Access Level for the Security System
- H4** = Number of lines configured in the body of the *TCP/IP Client* worksheet
- H5** = Tag configured in the *Connection Status* field
- H6** = Value configured in the *Server IP Address* field
- H7** = Value configured in the *Disable* field
- H8** = *Send Fields* checkbox (0=Unchecked ; 1=Checked)

- **Worksheet Body**

- B1** = Constant character (ASCII code = 12)
- B2** = *Tag Name* configured in the line 1
- B3** = *Remote Tag* configured in the line 1
- B4** = *Tag Name* configured in the line 2
- B5** = *Remote Tag* configured in the line 2

- **Notes:**

- The TAB char must be used between the *Tag Name* (for example: **B2**) and the *Remote Tag* (for example: **B3**).
- The syntax **TB4 SB5** is used for each line configured in the body of the *TCP/IP Client* worksheet.

III.13. DDECL???.DCL – DDE Client Worksheet

▪ Standard Syntax

```
H1
DdeCl
H2 | H3
H4
SH5
SH6
TH7
TH8
TH9
TH10
TH11
VH12
VH13
B1TB2 SB3
TB4 SB5
```

▪ Worksheet Header

H1 = Text configured in the *Description* field
H2 = Version of the file syntax (current value = 0)
H3 = Access Level for the Security System
H4 = Number of lines configured in the body of the *DDE Client* worksheet
H5 = Text configured in the *Application Name* field
H6 = Text configured in the *Topic* field
H7 = Tag configured in the *Connect* field
H8 = Tag configured in the *Read Trigger* field
H9 = Tag configured in the *Read Status* field
H10 = Tag configured in the *Write Trigger* field
H11 = Tag configured in the *Write Status* field
H12 = Value configured in the *Enable Read When Idle* field
H13 = Value configured in the *Write on Tag Change* field

▪ Worksheet Body

B1 = Constant character (ASCII code = 12)
B2 = *Tag Name* configured in the line 1
B3 = *Item* configured in the line 1
B4 = *Tag Name* configured in the line 2
B5 = *Item* configured in the line 2

🔗 Notes:

- The TAB char must be used between the *Tag Name* (for example: **B2**) and the *Item* (for example: **B3**).
- The syntax **TB4 SB5** is used for each line configured in the body of the *DDE Client* worksheet.

III.14.UACL???.UA – OPC UA Client Worksheet

- **Standard Syntax**

```
H1
UACL
H2|H3|H4
H5
SH6
T H7
T H8
E H9
E H10
S H11
E H12
V H13
T H14
T H15
T H16
T H17
T H18
V H19
E H20
V H21
T H22
T H23
T H24
T H25
T H26
R H27
T H28
I H29
R H30
R H31
E H32
R H33
E H34
;TB1|SB2|RB3|FB4|FB5|SB6
TB7|SB8|RB9|FB10|FB11|SB12
.
.
.
```

- **Worksheet Header**

- H1 = Text configured in the *Description* field
- H2 = Version of the file syntax (current value = 0)
- H3 = Access Level for the Security System
- H4 = Internal
- H5 = Number of lines configured in the body of the *OPC UA Client* worksheet
- H6 = Server Identifier Name
- H7 = Tag configured in the *Status* field

- H8 = Tag configured in the *Status Message* field
- H9 = Expression configured in the *Publish Rate* field
- H10 = Expression configured in the *Disable* field
- H11 = Text configured in the *Root Node or View* field
- H12 = Value configured in the *Enable Subscription* field
- H13 = Tag configured in the *Read Maximum Group Size* field
- H14 = Tag configured in the *Synchronous Read Trigger* field
- H15 = Tag configured in the *Asynchronous Read Trigger* field
- H16 = Tag configured in the *Read Count* field
- H17 = Tag configured in the *Read Status* field
- H18 = Tag configured in the *Read Status Message* field
- H19 = Value configured in the *Read Maximum Aging* field
- H20 = Expression configured in the *Write On Tag Change* field
- H21 = Value configured in the *Write Maximum Group Size* field
- H22 = Tag configured in the *Synchronous Write Trigger* field
- H23 = Tag configured in the *Asynchronous Write Trigger* field
- H24 = Tag configured in the *Write Count* field
- H25 = Tag configured in the *Write Status* field
- H26 = Tag configured in the *Write Status Message* field
- H27 = Boolean representing the *Refresh ID on StartUp* check box
- H28 = Tag configured in the *Reload Trigger* field
- H29 = Integer representing the *Group Data/Event* combo box (Data = 0 / Event = 1)
- H30 = Boolean representing the *Ensure Cash Synchronization* check box
- H31 = Boolean representing the *Enable Bit Notation* check box
- H32 = Expression configured in the *Sampling Rate* field
- H33 = Boolean representing the *Enable Sampling Rate* check box
- H34 = Expression configured in the *Queue Size* field

▪ **Worksheet Body**

- B1 = *Tag Name* configured in the line 1
- B2 = *Browse Path* configured in the line 1
- B3 = *Scan* selected in the line 1 (0=Always; 1=Screen)
- B4 = *Div factor* configured in the line 1
- B5 = *Add factor* configured in the line 1
- B6 = *Node ID* configured in the line 1
- B7 = *Tag Name* configured in the line 2
- B8 = *Browse Path* configured in the line 2
- B9 = *Scan* selected in the line 2 (0=Always; 1=Screen)
- B10 = *Div factor* configured in the line 2
- B11 = *Add factor* configured in the line 2
- B12 = *Node ID* configured in the line 2

III.15.OPCX???.OPX – OPC XML/DA Client Worksheet

▪ Standard Syntax

```
H1
OPCX
H2 | H3|H4
H5
SH6
T H7
T H8
E H9
E H10
S H11
E H12
V H13
T H14
T H15
T H16
T H17
T H18
V H19
E H20
V H21
T H22
T H23
T H24
T H25
T H26
R H27
T H28
I H29
R H30
R H31
E H32
;TB1|SB2|RB3|FB4|FB5|SB6
TB7|SB8|RB9|FB10|FB11|SB12
.
.
.
```

▪ Worksheet Header

- H1 = Text configured in the *Description* field
- H2 = Version of the file syntax (current value = 0)
- H3 = Access Level for the Security System
- H4 = Internal
- H5 = Number of lines configured in the body of the *OPC UA Client* worksheet
- H6 = Server Identifier Name
- H7 = Tag configured in the *Status* field
- H8 = Tag configured in the *Status Message* field
- H9 = Expression configured in the *Publish Rate* field
- H10 = Expression configured in the *Disable* field

- H11 = Text configured in the *Root Node or View* field
- H12 = Value configured in the *Enable Subscription* field
- H13 = Tag configured in the *Read Maximum Group Size* field
- H14 = Tag configured in the *Synchronous Read Trigger* field
- H15 = Tag configured in the *Asynchronous Read Trigger* field
- H16 = Tag configured in the *Read Count* field
- H17 = Tag configured in the *Read Status* field
- H18 = Tag configured in the *Read Status Message* field
- H19 = Value configured in the *Read Maximum Aging* field
- H20 = Expression configured in the *Write On Tag Change* field
- H21 = Value configured in the *Write Maximum Group Size* field
- H22 = Tag configured in the *Synchronous Write Trigger* field
- H23 = Tag configured in the *Asynchronous Write Trigger* field
- H24 = Tag configured in the *Write Count* field
- H25 = Tag configured in the *Write Status* field
- H26 = Tag configured in the *Write Status Message* field
- H27 = Boolean representing the *Refresh ID on StartUp* check box
- H28 = Tag configured in the *Reload Trigger* field
- H29 = Integer representing the *Group Data/Event* combo box (Data = 0 / Event = 1)
- H30 = Boolean representing the *Ensure Cash Synchronization* check box
- H31 = Boolean representing the *Enable Bit Notation* check box
- H32 = Value configured in the *Percent Deadband* field

▪ **Worksheet Body**

- B1 = *Tag Name* configured in the line 1
- B2 = *Browse Path* configured in the line 1
- B3 = *Scan* selected in the line 1 (0=Always; 1=Screen)
- B4 = *Div factor* configured in the line 1
- B5 = *Add factor* configured in the line 1
- B6 = *Array Index* configured in the line 1
- B7 = *Tag Name* configured in the line 2
- B8 = *Browse Path* configured in the line 2
- B9 = *Scan* selected in the line 2 (0=Always; 1=Screen)
- B10 = *Div factor* configured in the line 2
- B11 = *Add factor* configured in the line 2
- B12 = *Array Index* configured in the line 2

IV. Map of Revisions

Revision	Author	Date	Comments
A	Fabio Terezinho	Feb/15/2000	Initial revision
B	Fabio Terezinho	Feb/16/2000	<ul style="list-style-type: none"> ▪ Included Index ▪ Included Recipe Configuration Files ▪ Included OPC Configuration Files
C	Fabio Terezinho	Jun/15/2000	Included TCPClient Configuration Files
D	Fabio Terezinho	Dec/14/2000	Included parameter T7 for TAGL.TXT file, for Studio v4.1
E	Fabio Terezinho	Jan/05/2001	<ul style="list-style-type: none"> ▪ Included B4 and B7 (Scan Type) for OPCCL???.OPC worksheet ▪ Included H7 (XML Format) for <RecipeName>.RCP worksheet
F	Fabio Terezinho	Mar/25/2002	<ul style="list-style-type: none"> ▪ Overall layout revision ▪ Included ALARM???.ALR – Alarm Worksheet ▪ Included TREND???.TRD – Trend Worksheet ▪ Included <ReportName>.REP – Report Worksheet ▪ Included ODBC???.DBC – ODBC Worksheet ▪ Included MATH???.MAT – Math Worksheet ▪ Included SCHED???.SCH – Scheduler Worksheet ▪ Included <DriverName>???.DRV – Standard Driver Worksheet ▪ Included DDECL???.DCL – DDE Client Worksheet
G	Fabio Terezinho	Aug/19/2003	Included Proprietary Notice
H	Fabio Terezinho	Oct/3/2003	Layout revision
I	Fabio Terezinho	Feb/21/2005	Updated the TCP/IP Client worksheet (included parameters H7 and H8).
J	Fabio Terezinho	Mar/3/2010	Updated OPC Client worksheet configuration.
K	Marcelo Carvalho	Aug/10/2011	Updated TAGL.TXT
L	André Körbes	Oct/13/2011	Updated TAGL.TXT
M	Marcelo Carvalho	Oct/19/2011	Updated TAGL.TXT
N	Fabio Terezinho	Sep/23/2013	<ul style="list-style-type: none"> ▪ Included <DriverName>.MDV ▪ Included <DriverName>.SDV
O	Joel Nascimento	Sep/22/2014	<ul style="list-style-type: none"> ▪ Included UACL???.UA – OPC UA Client Worksheet ▪ Included OPCX???.OPX – OPC XML/DA Client Worksheet

