



2L FIELD DEVELOPER v 11.X

RELEASE NOTES

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Release versions overview

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_2L_Comms_Manager/_2L_Comms_Manager_MDM

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conversion tools and utilities

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Release notes 2L Field developer

2l field developer/designer v 11.01.11

Changes in this release

New commands from release 11.1 can be tested in Integrated test environment

Listview functionality added to integrated test.

Larger screen sizes added (up to 1600 x 1200)

Dialog windows adapted to Vista/W7 basic window layout

COMMANDLIST.TXT includes the latest 2L commands up to version 11.05.17 (release 11.2)



Release notes 2L Field

Latest arm-release 11.05.17

Latest PC(XP)-release 11.03.23

===== New commands =====

RUNW <file>

Start executing <file> as a new process and waits for the process to finish

NEWDATE <FieldName> DateString Count

Calculates new date in dateformat from Datestring (in dateformat) + Count (number, can be negative), the resulting date is given in <FieldName>

GETINDEXREC <Indexstring>

Same command as GETINDEX, but the record found is now available via the SEARCHREC-variable

SETFIELDVAL <Field1> <Field2>

Fill <Field1> with content of <Field2>. Here <Field2> can be a variable referring a field.

GETSVAL <Colidx> <FieldName>

Fill <Fieldname> with field Colidx (starting with 0) from SEARCHREC-record

This command is identical with GETSREC command !!

EMPTYVAL <Value>

This command is identical with EMPTY <value>

NOTEMPTYVAL <value>

This command is identical with NOTEMPTYVAL <value>

CLEARLIST <Fieldname>

Empty the listitems for <Fieldname>. This does NOT remove the listfile itself!!

FULLSCREEN

Has no function for ce. On the PC : show the form/sheet windows fullscreen

CLEARSPECIALS <Fieldname>

Remove the "specials" for field <Fieldname>

SETSPECIALS <Fieldname> <Specials>

Set the "specials" for <Fieldname> to <Specials>

CLEARMINMAX <Fieldname>

Remove the min/max checking for <Fieldname>

SETMINVAL <Fieldname> <value>

Set checking on minval for <Fieldname> to <value>

SETMAXVAL <Fieldname> <value>

Set checking on maxval for <Fieldname> to <value>

SETINPUTTYPE <Fieldname> <Inputtype>

Set inputtype for <Fieldname> to <Inputtype>

SETINPUTLENGTH <Fieldname> <L(.D)>

Set inputlength for <fieldname> to L charactres (or L characters, with D decimals)

DECVAL <Fieldname>

Decrement the numeric part of the actual value of <Fieldname>

DELLASTREC <datafile>

Delete last record from <datafile>

DELONEREC <datafile> <startstr>

Delete record(s) from <datafile> starting with <startstr>



===== New variables =====

_2LVERSION

The actual version of 2L Field

_HHID

Unique Serial number of handheld/PC

_MODULE

Name of module folder (can be empty)

_PROJECTPATH

Full path to active project (includes Module folder)

=====

Changes in functionality

- a) Selecting an item in a S-field while LISTSELECTION was set to SINGLE, will only set the focus to the next inputfield when the S-field contains a valid end-function
- b) Filtering and searching can now be used with "not-equal" conditions (f.e. filter on Fieldname not empty)
Fieldname<>[]
- c) Message- en Error-beeps can now be turned off (and on again) using:
SAVETOREG BEEP OFF
SAVETOREG BEEP ON
- d) The maximum length of the SEARCHREC-variable was extended from 250 to 700 characters
- e) DEBUG FILE functionality added
All debugging messages will be logged in a file (\2ldebug.txt on handheld, \2ldebugxp.txt on PC, \2ldebugdev.txt in developer Test-environment) instead of popping-up
- f) Module level selection added
Projects can be grouped into modules
General forms, cmd-files and lists can be situated in the module folder
Specific data- and other files will be located in the individual project subfolders
- g) Form-menu added for projects without start.frm
Show form info in scroll-list
Select record from user-definable list
Start new record (if possible)
- h) faster and better checking on commands
- i) Empty lists in form/sheet never show up (empty list message is displayed)
listlengths are optimized in form and sheet
- j) Buttons with variable description, show up with the correct (actual) description in the user menu (Extra)
HIDE/SHOW button commands work in both form and sheet and in the user menu
- k) LOADLIST works, even when the original listfile was not present



l) SETSUBVAL can now use a substring (like _X_) to split text

m) Buttons with variable descriptions, will get the proper text both on the button and in the user menu

n) HIDE and SHOW commands on Buttons can also be used in spreadsheet mode and in user menu

=====

HH-specific changes

a) Added SD-MMC card in 2linit

b) Improved screen display/repaint

Buttons and fields enlarged for the larger screen sizes

Better automatic redisplay when orientation changed

c) Pulldown list handling improved

clicking somewhere on the field will now automatically open the list (if present)

d) Listselection under WM6.5x OS with gestures works fine.

e) Spreadsheet layout improved:

3 buttons (k) for numeric keyboard, (b) for buttons, (s) for scroll-buttons

improved rearrangement when orientation is changed



Release notes 2L Connect

Latest version:
2L Connect 11.05.17

===== NEW COMMANDS =====

a1) since 81014:

ALERT <Text> : Display alert dialogbox showing <Text>
ERROR <Text> : Display error dialogbox showing <Text>

REMOTE 2LDIR

REMOTE DRIVERSDIR : Change to the Drivers folder on the handheld

REMOTE SVGDIR : Change to the SVG folder on the handheld

REMOTE BACKUPDIR : Change to the Backupfolder on the handheld

REMOTE RUN <ProgramName> : Start <ProgramName> on the handheld

With these new commands it is possible to create updatescripts to update 2L, SVGViewer and drivers on the handheld.

Default updatescripts will be included in the updates for 2L, the SVGViewer and the Drivers.

a2) since 90428

SAVETOREG <RegName> <Value>

Save <Value> in registervariable <Regname> on the HH
<RegName> will be created is not existing

DELREG <RegName>

Remove <RegName> from the registry on the HH

;Comment

Lines starting with a ; will be seen as comments in the scriptfile

a3) since 90825

GETHHIDSHORT

Similar to GETHHID, but only saves last 4 characters of handheld S/N to file
HHIDSHORT.TXT

Also saves full S/N to variable %_HHID% and short S/N to %_HHIDSHORT%

SAVE <FileName> <Text>

Create <FileName> with content <Text> on the PC

a4) since 100412

REMOTE MODULE <Modulename> :

Projects can be grouped into modules, where projects are subfolders in this module



a5) since 100729

GET2LVERSION

Get the installed version of 2L Field and save as 2LVERSION.TXT

JOIN <Dataset1> <Dataset2>

Join the two datasets (see 2L Field JOIN command)

SELECT <Listfile> <Varname> (<Prompt>)

Select an item from the <Listfile> list and save in <Varname>

a6) since 110104

CREATEINDEX <datafile> <Indexname>

Insert indexcol in dataset, giving the dataset a unique indexcolumn (== recordnr)

===== IMPROVED/EXTENDED COMMANDS =====

b1) since 81014:

COPY <OldFileName> <NewFileName>

Copy <OldFileName> to <NewFileName>, overwrite <NewFileName> (wildcards are allowed)

REMOTE COPY <OldFileName> <NewFileName>

Copy <OldFileName> to <NewFileName> on the HH (wildcards in the filenames are allowed)

GETHHID

Saves the S/N of the HH in a file called HHID.TXT, but also to a user variable _HHID

b2) since 90428

LOADFROMREG <RegName> (<VarName>)

If <VarName> was omitted, <RegName> will be used as variable-name

b3) since 100729

DEBUG FILE

Debugging results are logged in a file called debug2ls.txt in the _2l_connect folder

b4) since 110104

SAVE <filename>

<filename> without specific pathname, will be saved in actual pc path (see CWD command)

IFFILE <filename>

<filename> without pathname will be checked in the actual pc path

CREATEINDEX <datafile> <indexname>



<datafile> without pathname must be present in actual pc path

c) Initialisation checking in script mode.

When 2L Connect starts in script mode (when you run a 2ls-file), it first checks the script for LOCAL mode.

In LOCAL mode (the script contains the command LOCAL) it will not connect to active sync any more, but will try to connect to the locally installed version of 2L Field XP.

When you only work in LOCAL mode, Active Sync or Mobile Device Center does not have to be installed on your PC any more.

d) Initialisation checking in user mode.

When 2L Connect starts in user mode (when you run the _2L_Connect.exe program), it will first register itself on the local PC, so 2ls scripts can be run with this (new) version of 2L Connect.

Next it will try to connect to the handheld.

When connected it will look for an installed version of 2L Field.

When 2L Field was not found, the program will issue a warning.

e) Using variables in 2ls script files

The use of variables in 2ls files has been extended.

You can now use system variables:

_PROJECT : The active projectfolder name

_DATE : The actual date formatted as YYYY-MM-DD

_YYYYMMDD : The actual date formatted as YYYYMMDD

_TIME : The actual time formatted as HH-MM-SS

_HHMMSS : The actual time formatted as HHMMSS

_HHID : The S/N of the connected handheld (first issue command GETHHID)

You can also use handheld registry variables like this:

Suppose you have a loginform on the handheld where the loginname is saved as registry variable LASTLOGIN

With the command

```
LOADFROMREG LASTLOGIN LASTHHUSER
```

you've created a variable LASTHHUSER containing the value from the registryvariable LASTLOGIN on the handheld.

If each LASTHHUSER has its own downloadfolder on the PC, you can change to this downloadfolder with

```
CWD %LASTHHUSER%
```

Note : these uservariables are sessionbased.

f1) Improved Error and Message handling

Error, message and warning pop-up screens can show larger text-messages, and include error codes:

Error 001	2L Connect not properly registered
Error 010	2L Field not installed on handheld



Error 100 Could not connect to handheld
Error 101 No projects on HH
Error 102 Cannot create new project [<project>] on PC
Error 200 Script not finished, View log: <logfile>
ERROR 999 Errormessage from cmd

Confirm 100 Save active script ?
Confirm 101 Script [<scriptfile>] already exists, Overwrite ?
Confirm 102 Script was changed, Save it ?

ALERT 999 Alertmessage from cmd

Info 100 Script completed

f2) Improved debugging logging and error handling

With DEBUG ON, an extended start command dialog screen will be shown, with a "Cancel debugging" button.

If a command contains a variable, the expanded command will be shown too.

The debug dialog screen at the end of each command, will ONLY be shown when the command fails.

Logging will now include handling of ONFAIL and GOTO commands with
Resume cmd [:Label]

LOADFROMREG, SAVETOREG and DELREG will fail if the registry on the HH could not be accessed

g) Conversion tools DATTOCSV.EXE and CSVTODAT.EXE

Both conversion tools have improved error handling.

When the source and/or targetfile are being used by another program, you will see a warning. Now you can close the file and retry the conversion.

h) Conversion tools XLSTODAT.EXE and DATTOXLS.EXE

These tools now use a very fast dll (olexlsf.dll) instead of an ADO-connection to read and write to xls files.

i) Extended folder name handling:

i.1)

2l scripts can now be run from folders containing spaces in the foldername.

i.2)

You can use network folder names like \\mysharefolder





Release notes Comms Manager

Changes since version 10.x.x

MCM

10.11.05

Better checking on connected with slower responding handhelds (eg Eagle)

If the eagle does not respond in first try, it will be checked again during the next retries.

10.07.02

New command added

REMOTE MODULE <modulename>



Release notes 2L Drivers

All drivers were updated (10.07.01 and later) to be able to use modules

A) Zipping/unzipping on the handheld

1. Zipping files and folders using ZipCE.EXE

ZIPCE.EXE uses 4 registry settings to do the zipping

ZIPFOLDER <Zipfolder>

Specify the folder containing the files (and subfolders) to add to the zipfile (f.e. %_PROJECTSDIR%)

ZIPFILES <Zipfiles>

Specify the filemask (f.e. *.DAT)
ZIPFILES default to *.* (all files)

ZIPFILE <Zipfile>

Specify the resulting zipfilename (f.e. \DATFILES.ZIP)

ZIPEXCLUDELIST <Excludelist>

Specify which files and folders should be excluded from the zip
If ZIPEXCLUDELIST is not specified or not present, all <Zipfiles> will be added

ZipCE.EXE is a full 2l driver, which can be called using the 2l command

```
DRIVER ZIPCE.EXE \OK.DAT DUMMY1
```

If the zipping could not be completed, ZIPCE shows an info list and will wait for you to press the Ready button. Finally the DRIVER call will fail.

If the zipping was successful, ZIPCE closes automatically and the DRIVER call succeeds.

When zipping subfolders, the relative path-names will be specified in the resulting zipfile.

2. Unzipping files and folders using UnzipCE.EXE

UNZIPCE.EXE uses 2 registry settings

UNZIPFOLDER <Unzipfolder>

Specify the rootfolder where the files should be unzipped

UNZIPFILES <Unzipfiles>

Specify the zip-file(s) which should be unzipped

UnzipCE.EXE is a full 2l driver, which can be called using the 2l command

```
DRIVER UNZIPCE.EXE \OK.DAT DUMMY1
```

If the unzipping could not be completed, UNZIPCE shows an info list and will wait for you



to press the Ready button. Finally the DRIVER call will fail.

If the unzipping was successful, UNZIPCE closes automatically and the DRIVER call succeeds.

When unzipping files with relative path-names, the files will be unzipped to the specified relative paths.

Existing files will be overwritten without confirmation.

B) Update COMMS driver

Comms driver updated to 10.07.02

To be used with (Multi)CommsManager 9.07.16 and up.

- * Transfer of binary files now working
- * Implemented full commandset of CM 10.07.02
- * Extended (Error) messages
- * Registry handling for SAVETOREG, LOADFROMREG and DELREG
- * Execute file on HH (REMOTE RUN)
- * Send a list of existing 2L Projects on the HH (using a Projectmask)
- * BYE CLOSE, or CLOSE, will exit the Comms driver
- * Filelist includes date and time for SENDNEW and GETNEW commands
- * REMOTE CWD command implemented
- * REMOTE MODULE command implemented

C) Sartorius driver

CM version for Sartorius driver available (10.09.08) for CE

D) Mettler(_CM) driver for CE updated to 11.03.11

Both drivers will check the registry value of METTLER (METTLER_CM) regularly, and display correct messages

If the registry variable METTLER_BIDIR is set to 0, both drivers will NOT use their bidir protocol

E) Camera driver update (10.10.18)

Not existing export folder will be created, so each new project can use its own project based picture folder

F) PC drivers update to 10.10.29

- * Use of COM10 and up implemented



- * Keyboard input build in to be able to cope with keyboard wedge scanners
- * Version registration build in
- * Default result file in project folder (no longer in root folder)



Release notes SVG Viewer

Latest arm-release 11.02.18

Latest pc-release 11.05.09

Changes in functionality since 9.12.13

SVGCRDFILE <newcrdfile>

Registersetting to add new objects to loaded map from <newcrdfile>
The file needs a header-line (id#x#y)

SVGDATAFILE <datafile>

With this setting the datafile does not need to match the map name any more.

<map>.ADD

On loading an SVG file <map>.SVG, objects in <map>.ADD will automatically be added to the map and to <map>.DAT
<map>.ADD will finally be removed after loading

SVGINSPECTION 0

Registersetting to disable automatic date stamping on start inspection of the selected object(s)

Drawing a line or plot, disables the double-click inspect functionality until the line or plot is completed

Starting the viewer from a sheet now fully functional

Module handling integrated in the viewer

After pressing the I-button (Inspect object), the map will NOT be centered any more.

This redisplay/centering could take seconds before the inspection was started.

Improved checking on existing object-ids when adding a new object.

Solved problems:

First plot/line/track objectcode generation much faster

Waitcursor visible during map loading

After Inputscreen for objectid, the map will be redisplayed correctly

Find will center the map on the found object

Registry setting SVG END , does NOT exit the viewer on restart any more.

Info for a Line point will display the coordinates of both points, and the length of the line.

Info for a track point will display the coordinates of the selected point, the number of points in the track and the total track length.



==== pc specific =====

Correct coordinate calculations can only be done after a first click somewhere on the map.

==== handheld specific =====

a) Close button removed

close the viewer with File, Exit, or SVG END command

b) use of map sections

On the handheld, the internal program memory limits svg map size to a few MB.

Besides loading a 4 MB map can take up to 1 minute.

In this case you can use detailed map-sections + a less detailed overview map.

The overview map and sections use the same object layer.

Display of the proper section (or overview map) is done automatically during zooming and panning.

Use the DXFTOSVG utility to split up large maps (in dxf) in svg map sections.

This feature is not available for the pc version, because much larger map sizes can be handled.