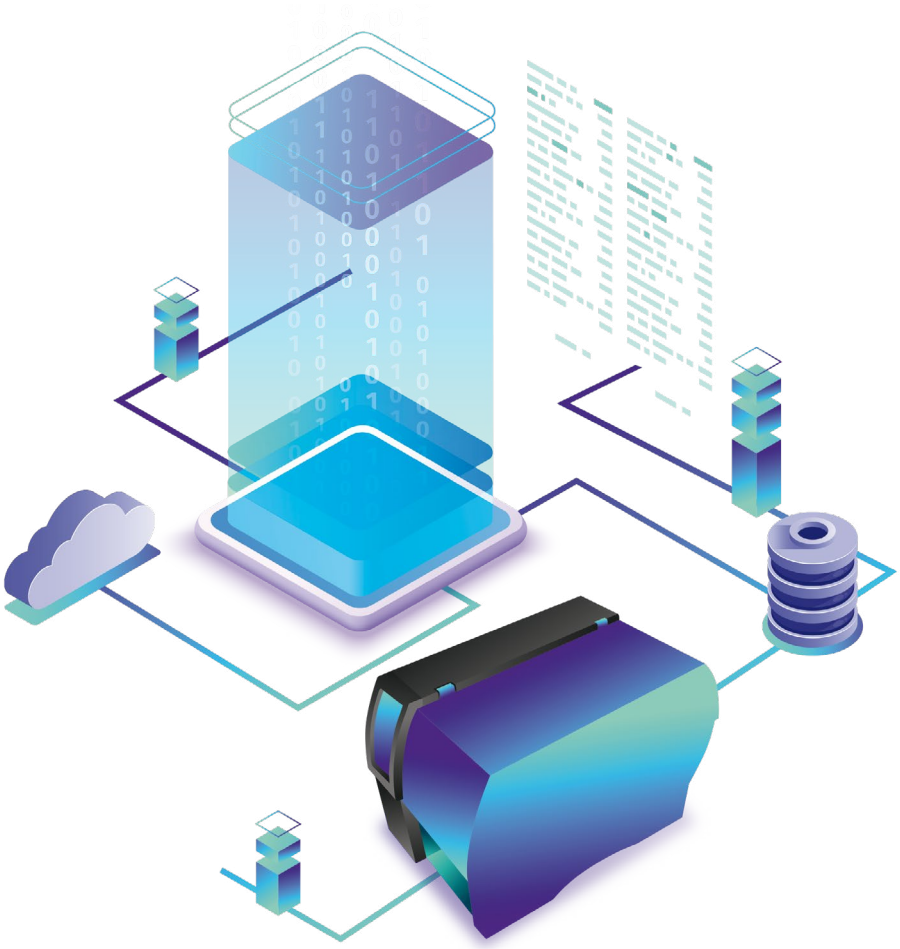
Quick guide



Connecting cab printing systems via UaExpert

OPC UA

03|2026

2 Instructions valid for the following cab products

	Type / Family
Label printing systems	SQUIX
	EOS
	MACH 4S
	XC Q
	XD Q
Print and apply systems	HERMES Q
	HERMES QL
	AXON 1
Print modules	PX Q

Topicality

Due to the further development of cab products, deviations from this documentation may occur.
Appearance and data correspond to the knowledge valid at the time this guide was prepared. Subject to change without notice.
Check → www.cab.de/en for latest data and models.

Contact

Regarding questions or comments please fill in → contact form on the cab homepage.

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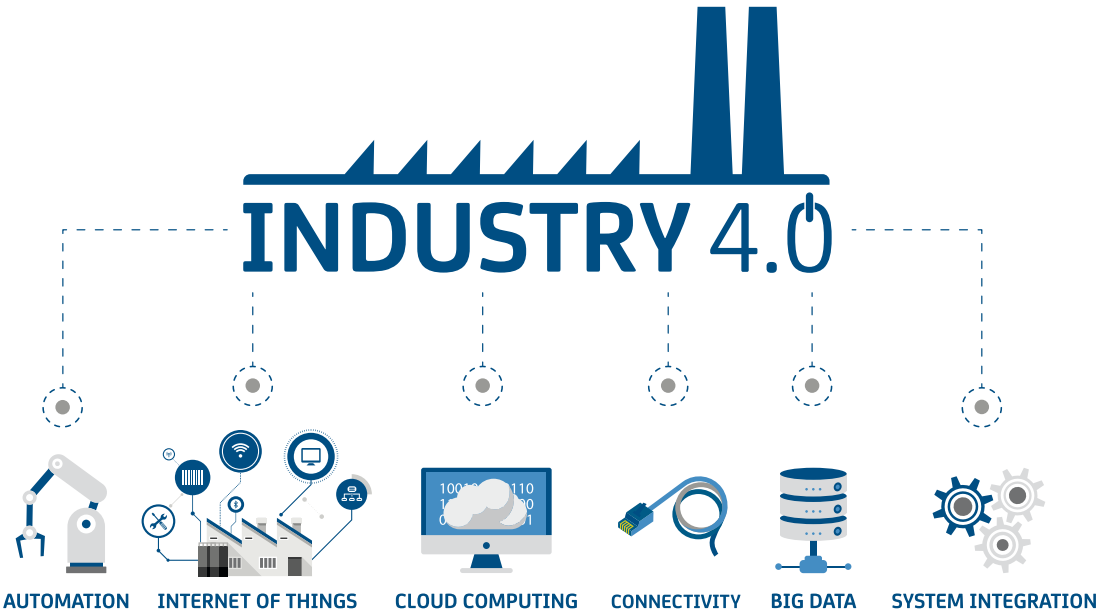


Supported features

- Server capabilities
- Server status
- Server diagnostics
- Manufacturer information
- Supported data types
- Event types
- Object types

- Information about printer model
- Information about connected peripherals
- Statistical data about printers, peripherals, print heads
- Printer setting configuration
- Access to memories such as SD, IFFS, USB
- I/O outputs
- Label loading
- JScript and ZPLII jobs
- Retrieving last print image as .png

- Individual configuration parameters
- Visibility in GUI
- Value range from / to
- Permissible increment
- Units such as mm, dB

- Fields included in the layout
- Objects such as barcodes, images, graphics, text, rich text

and many others

1 Events

DisplayName	BrowseName	NodeClass	DataType	Description
TotalCanceleventType	3:TotalCancelEventType	ObjectType		Printer total cancel event
SetupValueChangeEventType	4:SetupValueChangeEventType	ObjectType		A distinct setup value has changed.
SetupVisibilityChangeEventType	4:SetupVisibilityChangeEventType	ObjectType		A distinct setup value has changed its visibility flag.
IOStatusChangeEventType	3:IOStatusChangeEventType	ObjectType		I/O OUT status changed
Status	3:Status	Variable	UInt32	Combined I/O status (bit combination); see parameter I/O status
JobFinishEventType	3:JobFinishEventType	ObjectType		Finish message from printer
JobCancelEventType	3:JobCancelEventType	ObjectType		A (sub) job as definded by JScript j command was canceled on the printer
JobId	3:JobId	Variable	String	JobId as defined by JScript j command or an empty string in case of a TotalCancel
MethodResponseEventType	3:MethodResponseEventType	ObjectType		Peripheral device method response event base type
RequestId	3:RequestId	Variable	UInt32	RequestId is returned by the method call; helps to correlate requests with responses
Sequence	3:Sequence	Variable	UInt32	Response sequence number
Progress	3:Progress	Variable	Byte	Progress indicator of the method (0-255); method finished when value is set to 255
Result	3:Result	Variable	Byte	Result code of method response (0 on success)
JobInfoEventType	3:JobInfoEventType	ObjectType		Job information message from printer
Sequence	3:Sequence	Variable	UInt32	Response sequence number
JobId	3:JobId	Variable	String	JobId as defined by JScript j command
LabelNo	3:LabelNo	Variable	UInt32	Number of label under print in current print job
IsTestPrint	3:IsTestPrint	Variable	Boolean	It indicates whether currently printed label is a test print.
JobSize	3:JobSize	Variable	UInt32	Number of labels in current print job
ErrorEventType	3:ErrorEventType	ObjectType		Type of error as provided by JScript ESCs command
Detail2	3:Detail2	Variable	LocalizedText	Detailed error information part 2
Detail1	3:Detail1	Variable	LocalizedText	Detailed error information part 1

- Events individually subscribed
- Print job completed
- Individual / entire print job canceled
- Information about active job; printing X on Y
- Change in I/O status
- Error status in detail
- Settings changed via GUI

2 Clients

Exemplary codings

```
mm
J
H 150,0
S I1;0,0,68,70,100
O R,S,J
E OPCUA;opc.tcp://guest:pw3@10.0.0.90:4840
T:OPCVALUE;0,0,0,3,4;[I][OPCUA:ns=22;i=6020]
T 5,6,0,3,3;Actual Position: [*:OPCVALUE,1][D:0,2] Degree
A [?]
```

- OPC UA client for JScript / abc (read)
- Reading values from an OPC UA server
- Use as content for labels
- Use for abc
- Data types: Integer, floating point, string, byte string, XML element, Boolean, localized text, DateTime, range, EUInformation, enumeration

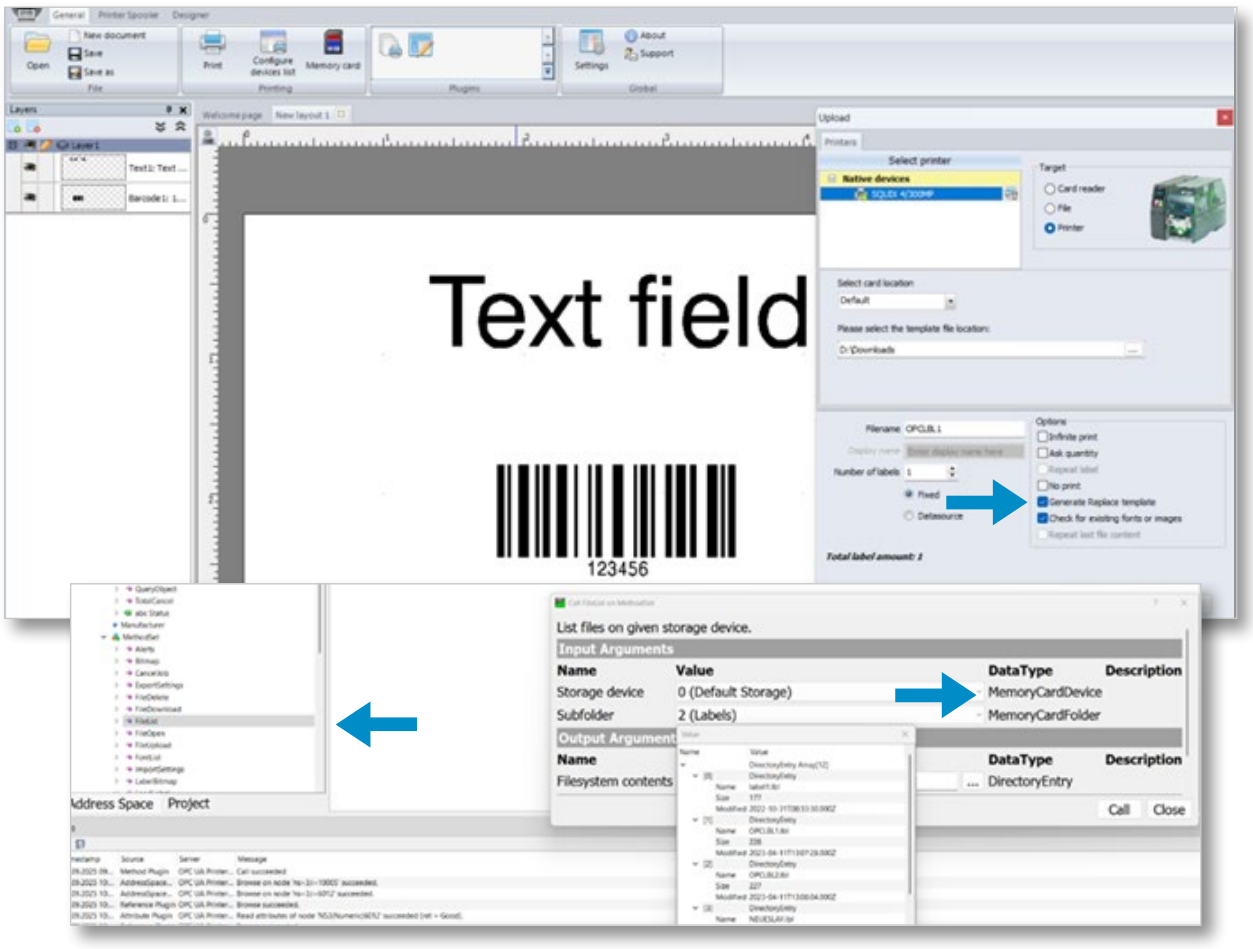
```
<ABC>
url$ = peek$("opcua0","ns=22;i=6020")J

print "m m"
print "J"
print "O R"
print "S I1;0,0,68,70,100"
print "T 10,10,0,5,pt10;"+str$(val(url$),"##.##")
print "A 1"
<ABC>
```

3 Loading a label with UaExpert

OPC UA must be enabled on the printer: Menu → 'Setup' → 'Interfaces' → 'Network services'
Read and write permissions must as well be set: Menu → 'Security' → 'Anonymous OPC UA'

Label programming is required, for example created on cablabel S3 Lite.
Save with cablabel S3 using the 'MemoryCard' feature.
Make sure 'Generate Replace Template' has been selected prior to saving the label.
Once the label has been saved or downloaded on the printer check via OPC UA
the availability of the label using the 'File list' MethodSet feature.



3 Loading a label with UaExpert

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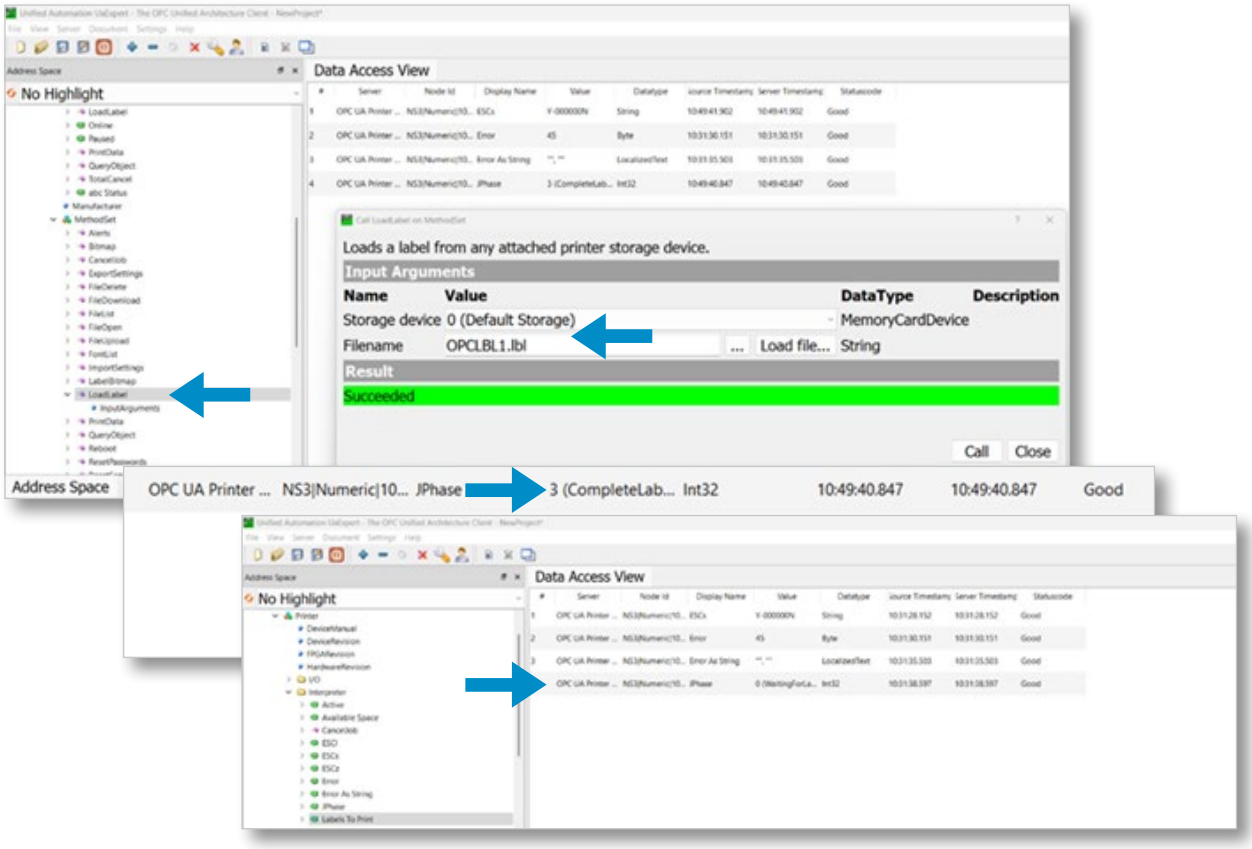
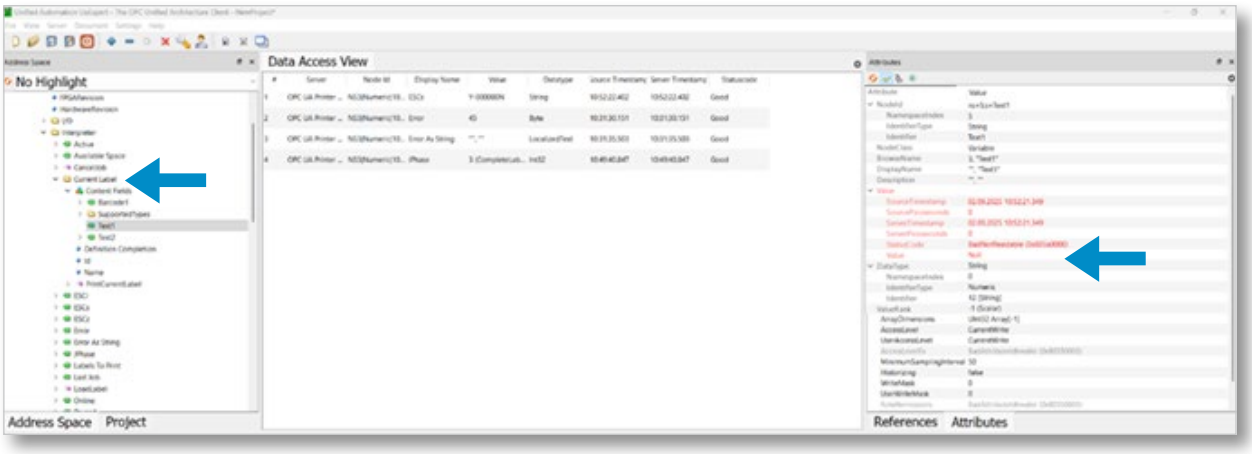
Now load the label from the storage space into the printer's active memory, using the 'LoadLabel' MethodSet feature.
Don't miss out file extension and a case-sensitive file name.
Use the interpreter 'JPhase' feature for checking that the label has been successfully load.
Value '3' indicates a label entirely loaded, while value '0' indicates that no label has yet been loaded.



4 Changing variable content with UaExpert

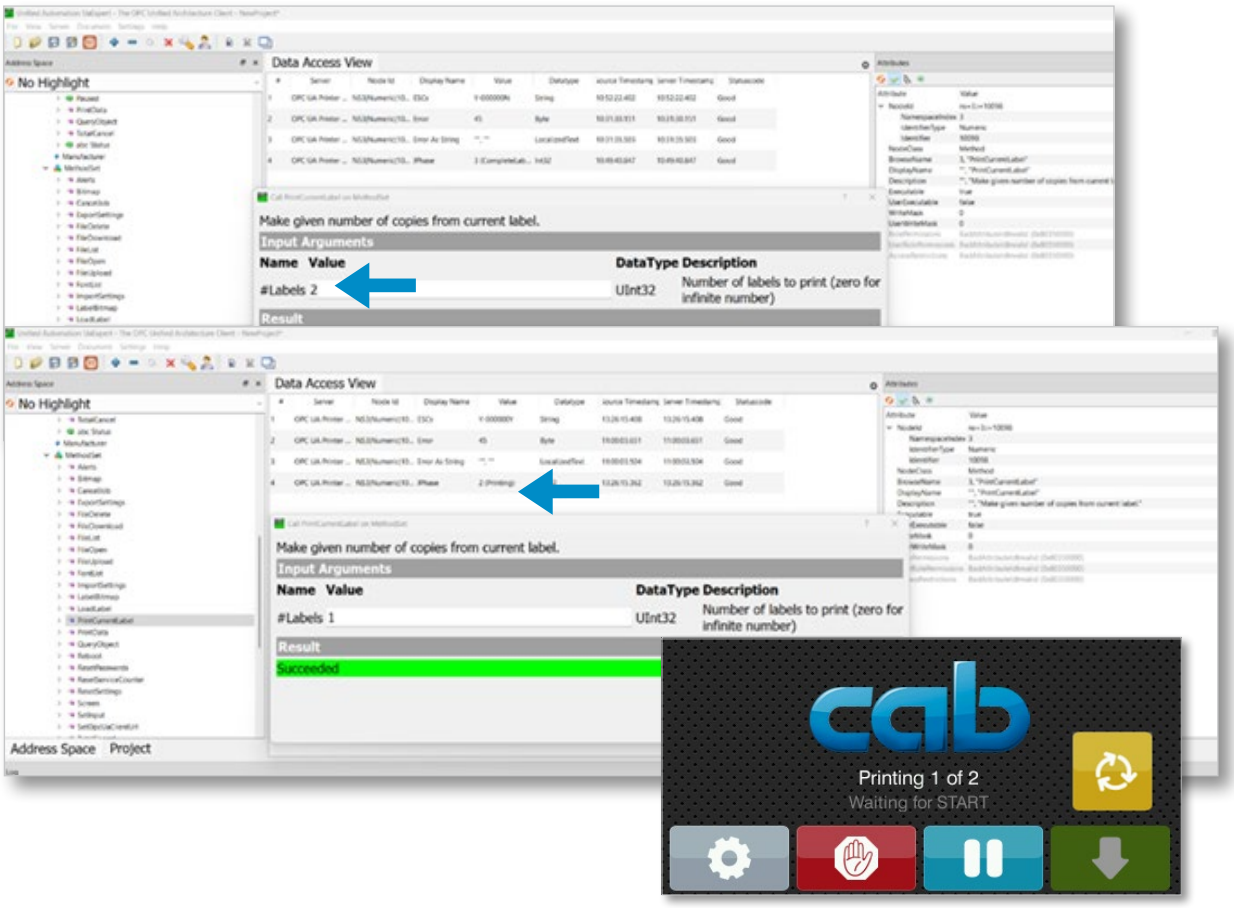
Once a label has been loaded change the variable content. For this, rebrowse the interpreter branch.
See 'CurrentLabel' with the content fields (text and barcodes as defined in the label programming).
Insert your new content in the value field and press return.

If succeeded, the new values are saved in your label. See the log at the bottom of UaExpert



5 Printing a label with UaExpert

Use the 'PrintCurrentLabel' MethodSet feature for telling the printer how much labels to print.
Once an entirely loaded label is ready, 'JPhase' displays '2' for printing.



A printer in use with an applicator (like HERMES Q) requires 'JSCRIPT P' as peel-off command. Therefore trigger an additional 'START' signal to print a label ('FSTLBL' first label input signal depending on the used cycle sequence).