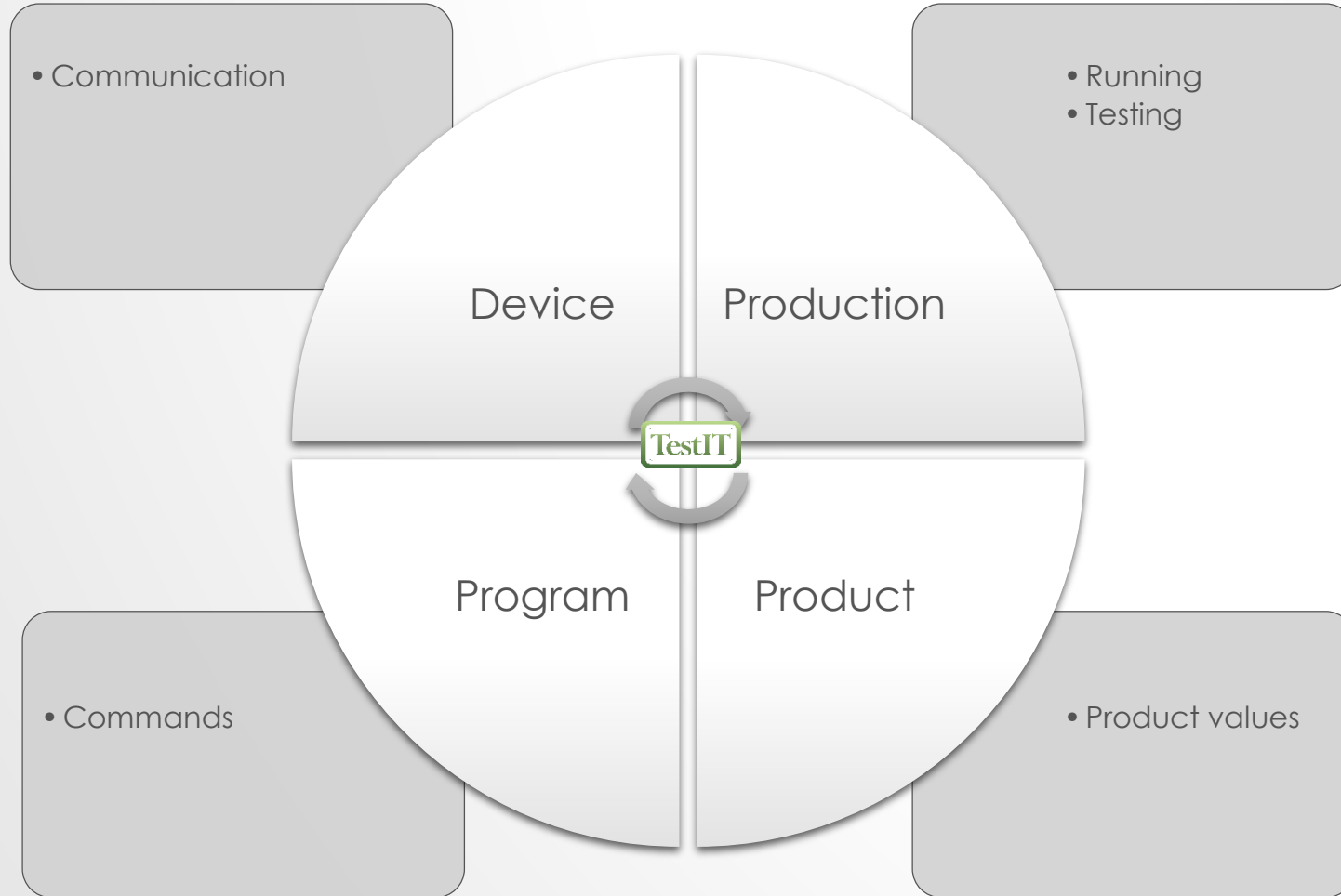
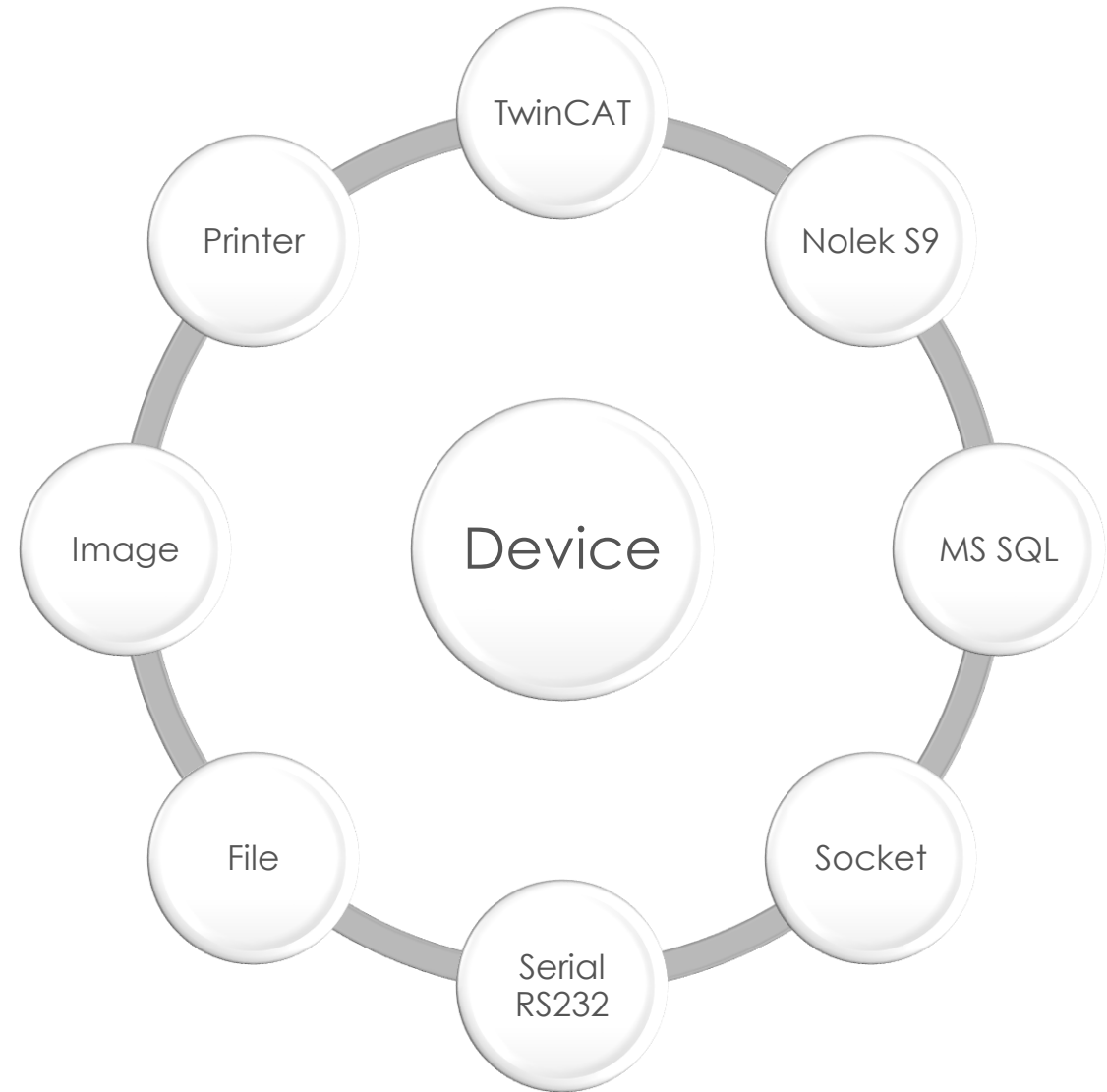


# MAIN PARTS



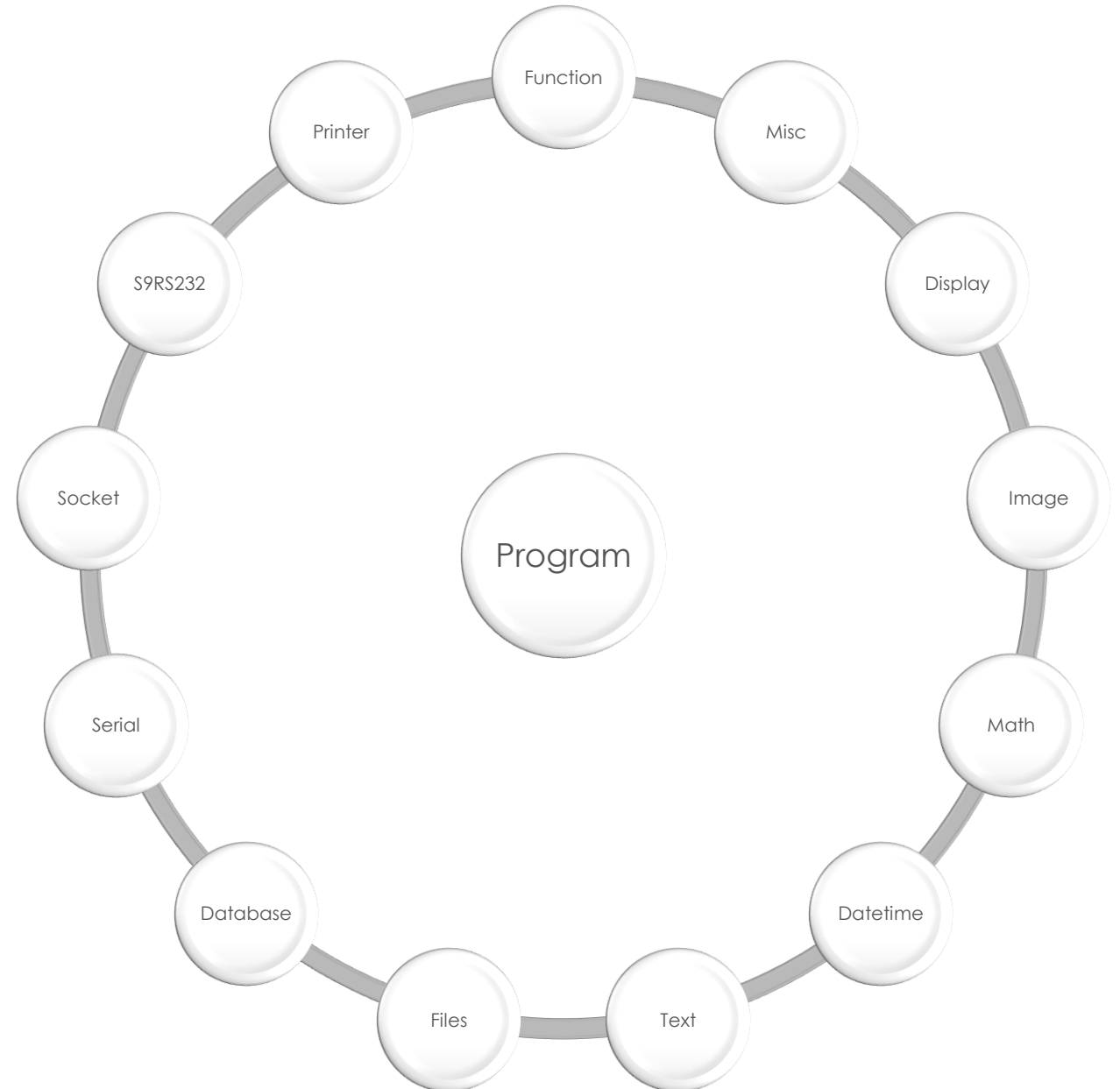
# DEVICE

- TwinCat I/O
  - Profibus, Device net, Can bus.
  - Festo CPX
- Nolek S9
- MS SQL database
- Socket
- Serial RS232
- File
  - Read, write and delete.
- Image
  - View
- Printer
  - Create own label or print layout



# PROGRAM

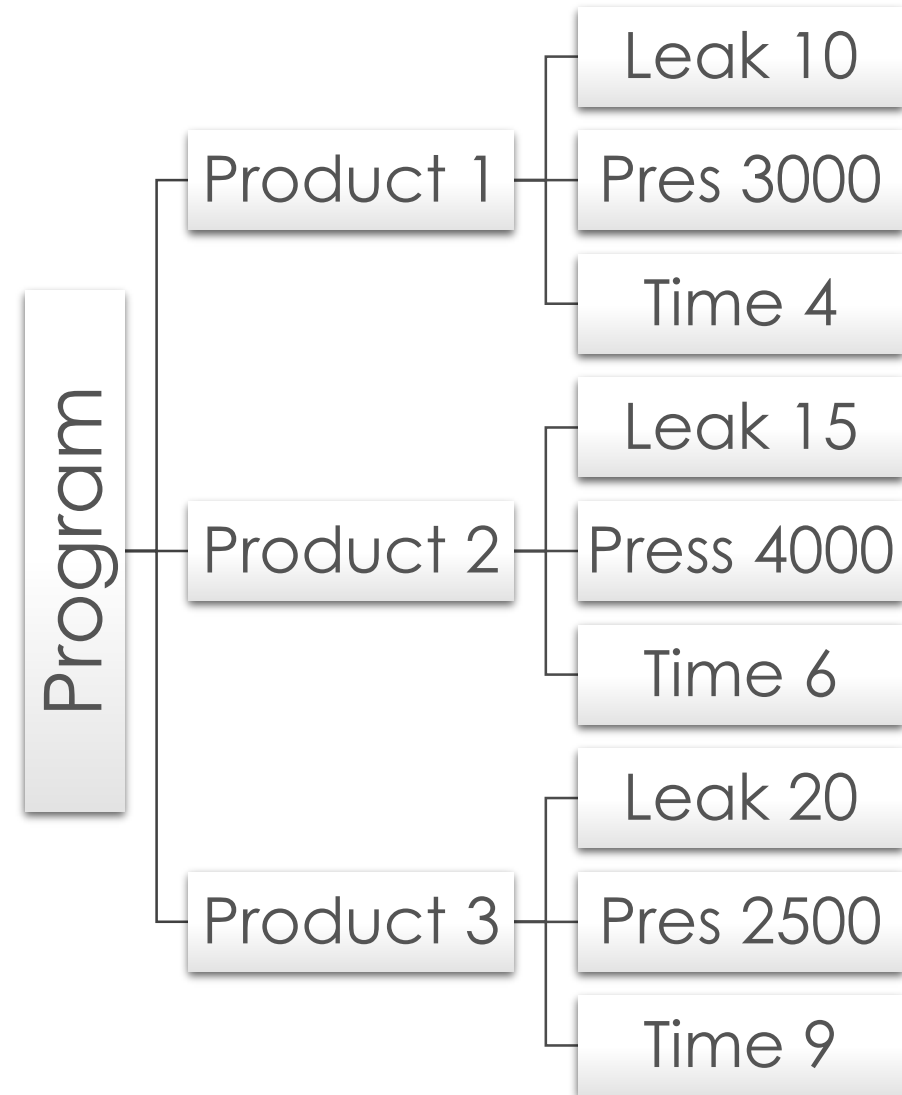
- Function
- Misc
- Display
- Image
- Math
- Datetime
- Text
- Files
- Database
- Serial
- Socket
- S9RS232
- Printer



# PRODUCT

Set product specific values

- Leak rate
- Pressure
- Delay times



# PRODUCTION

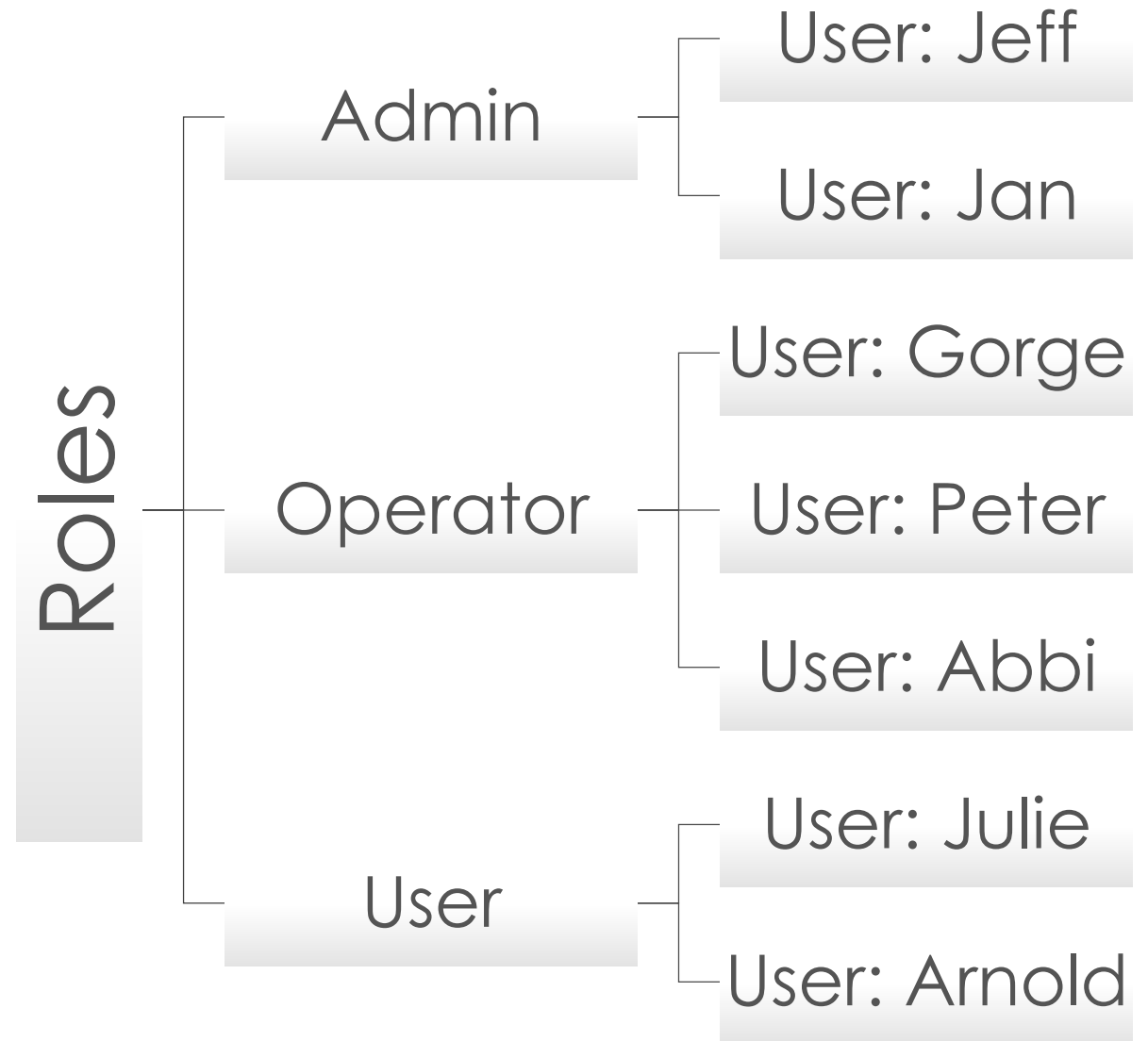
# Test running

Operator area

- Start/stop
- Yes/no
- Scan barcode

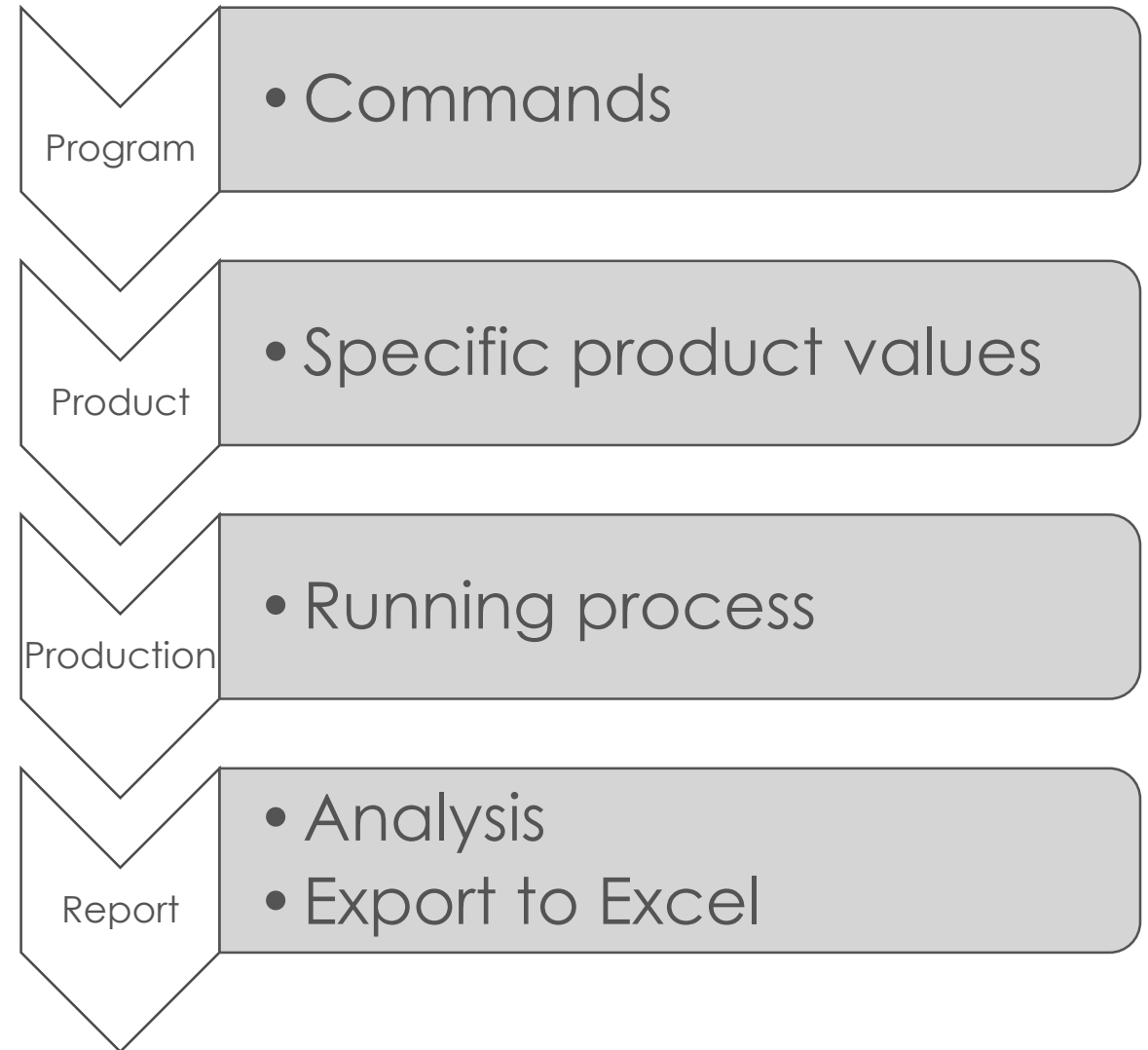
# USER, HANDLING

Create, Edit and Delete roles and users.



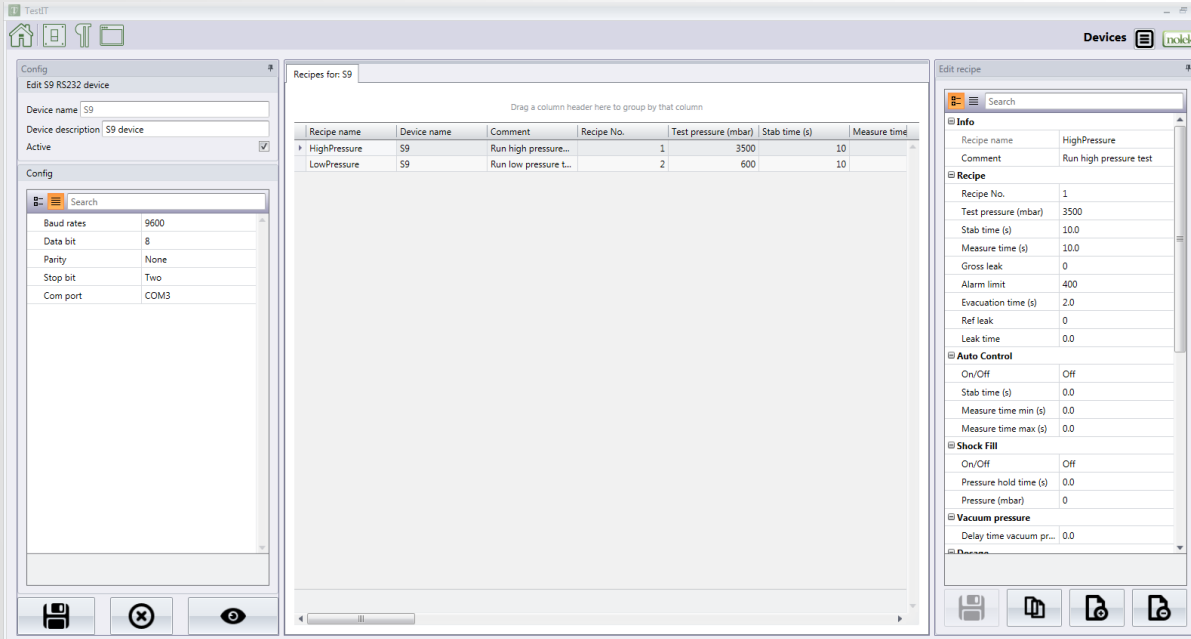
# DATA LOG DATA ANALYSIS EXPORT TO EXCEL

Save result from the process.  
Easy analysis in TestIT and easy  
export to Excel



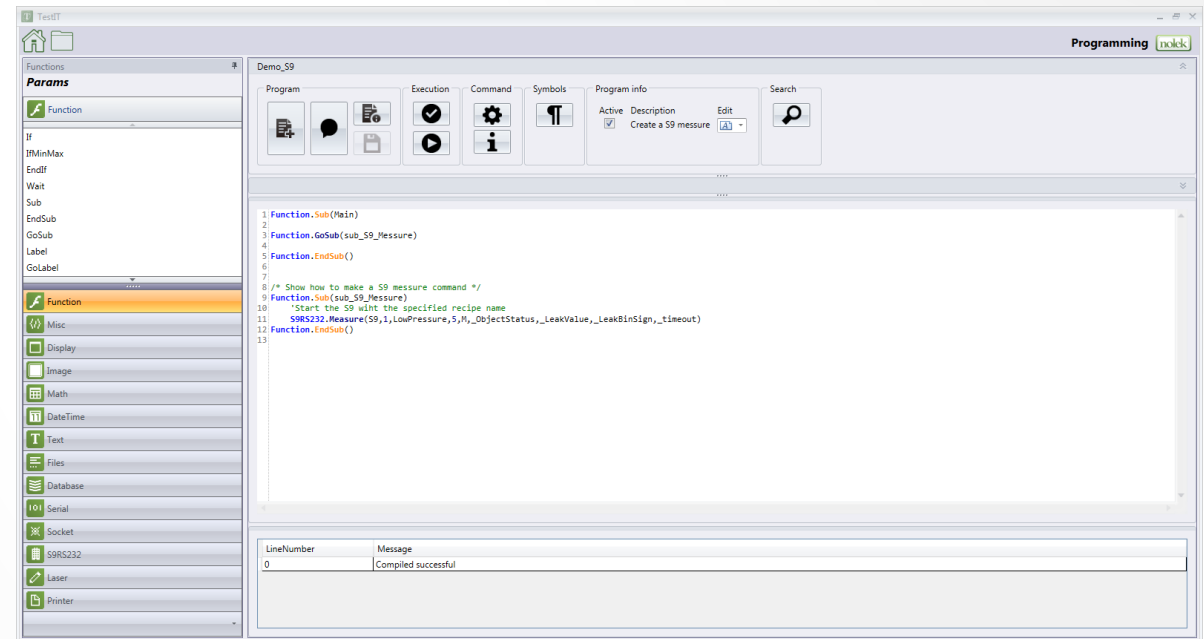


# S9 MEASURE



## S9 device

- Com port
- Recipe handling



## S9 measure command

- S9 device
- S9 recipe to run

# IMAGE WITH HEADER AND HELP TEXT

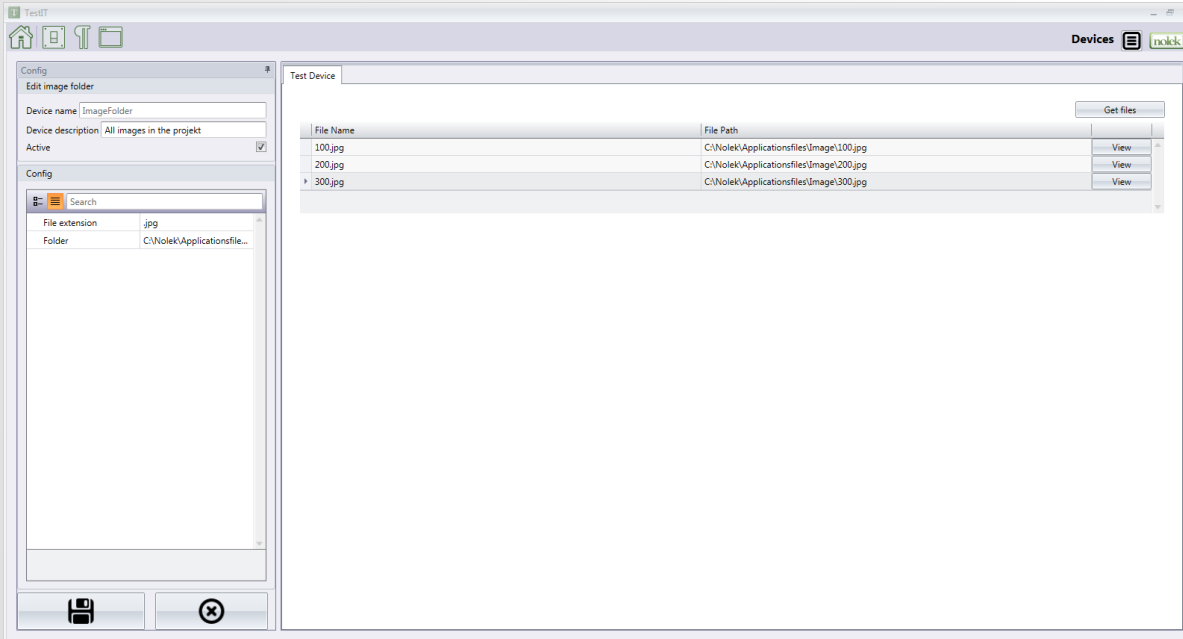


Image device

- Select image type
- Select folder

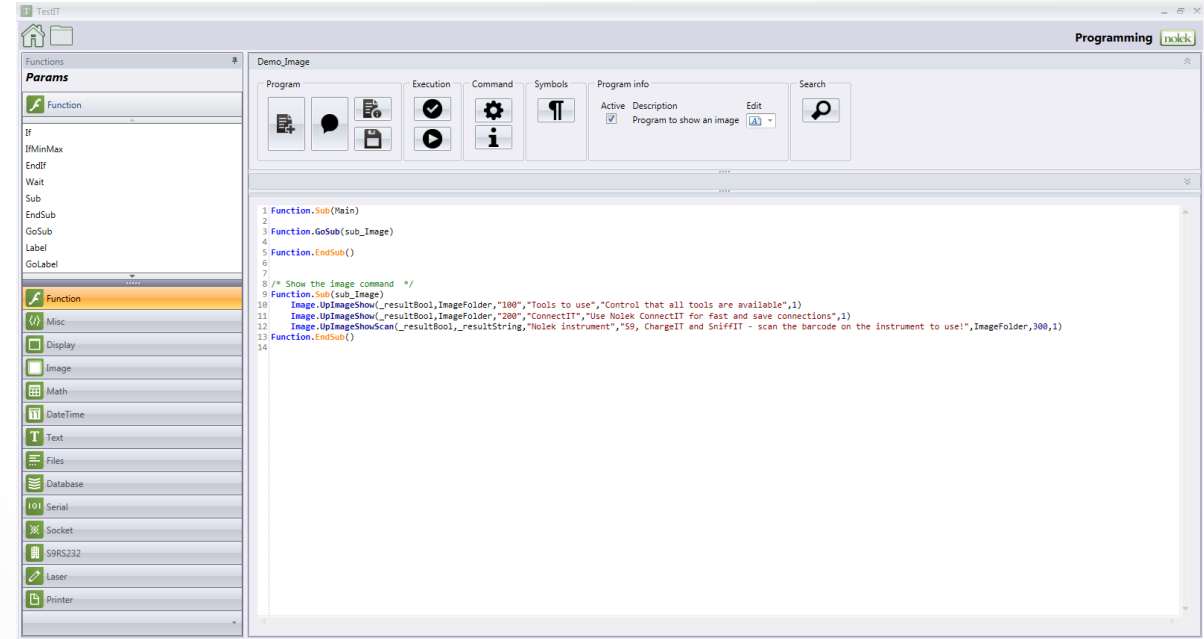


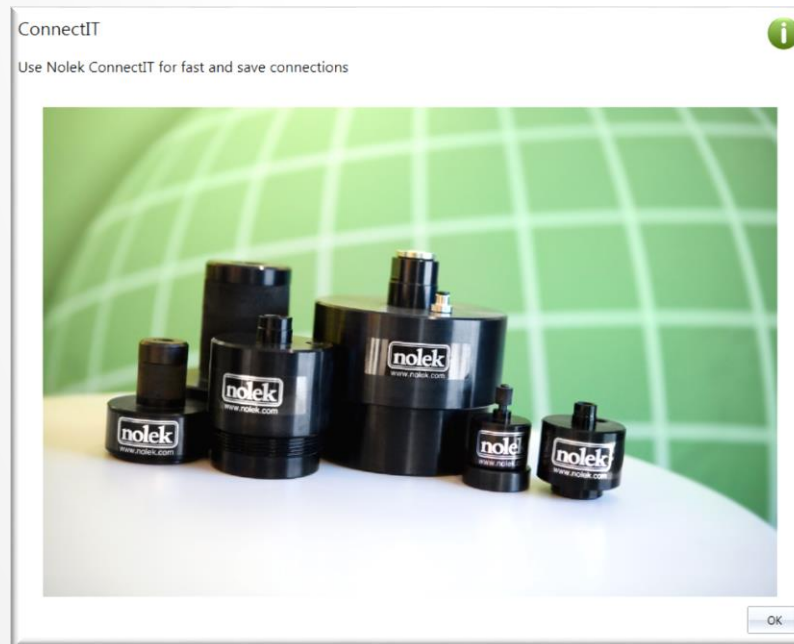
Image show command

- Image device
- Image name

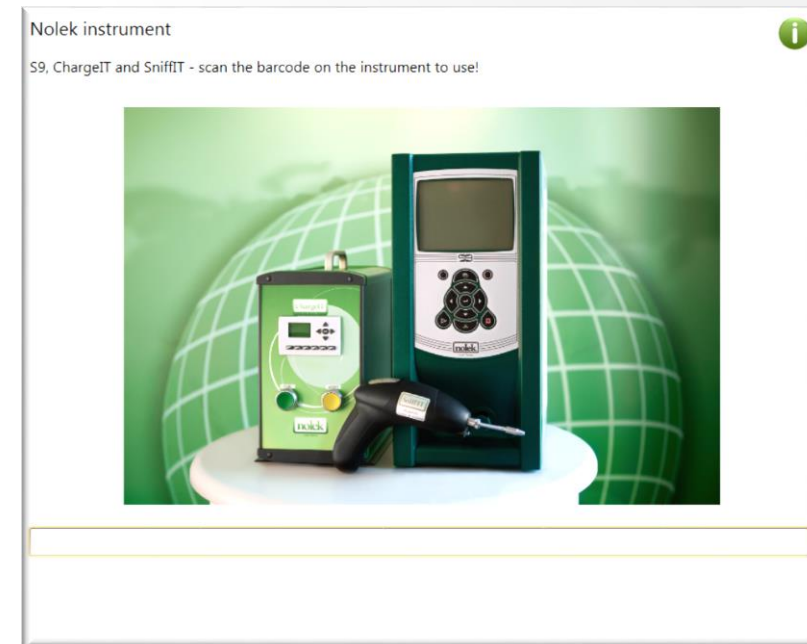
# IMAGE WITH HEADER AND HELP TEXT



ImageShowIO – Ok from Ok button or an input



ImageShow – Ok from Ok button



ImageShowScan – Ok from a scanner

# PRODUCTION

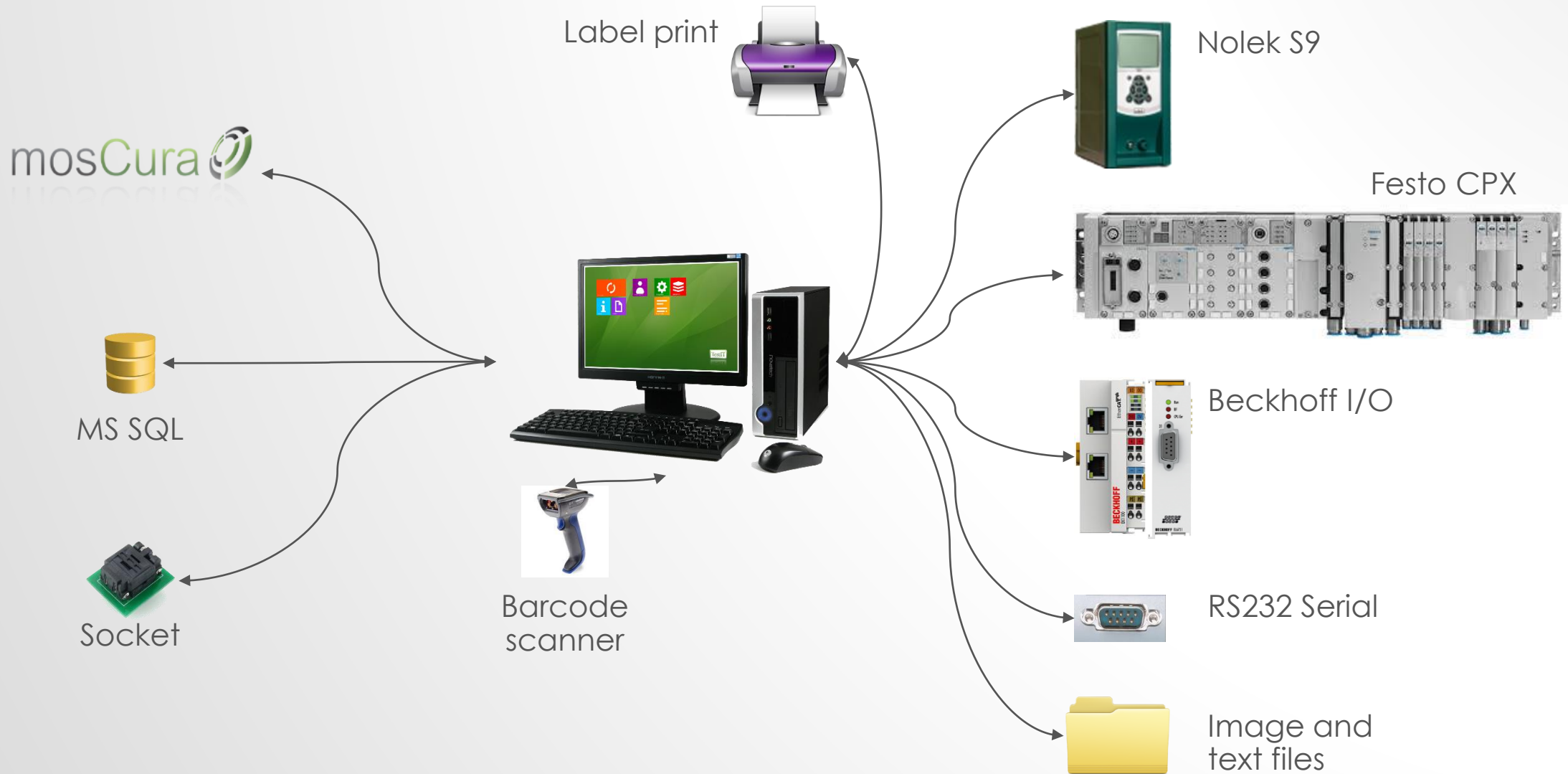
1. Result
  - Add from program
2. Message
  - Add from program
3. Symbol watch
  - Add/remove symbol from program.
4. System button
  - Create buttons in configuration.
5. Batch number
  - User defined.
6. Unique ID
  - All results saved with unique ID.
7. Cycle time
  - Actual cycle time.

The screenshot shows the TestIT Production interface. On the left, there are configuration panels: 'Buttons' with a 'Light off' button (4), 'Symbol watch' with a table (3), and 'Production Info' with fields for Batch (5), Unique ID (6), and Cycle time (7). The main area displays a table of production results (1) and a status bar (2).

Result name	Description	Result	Unit	Min	Max	Time
Number: 4	Short description	4	pa	0	400	3
Number: 5	Short description	5	pa	0	400	4
Number: 6	Short description	6	pa	0	400	5
Number: 7	Short description	7	pa	0	400	6
Number: 8	Short description	8	pa	0	400	7
Number: 9	Short description	9	pa	0	400	8
Number: 10	Short description	10	pa	0	400	9
Number: 11	Short description	11	pa	0	400	10
Number: 12	Short description	12	pa	0	400	11
Number: 13	Short description	13	pa	0	400	12
Number: 14	Short description	14	pa	0	400	13
Number: 15	Short description	15	pa	0	400	14
Number: 16	Short description	16	pa	0	400	15
Number: 17	Short description	17	pa	0	400	16
Number: 18	Short description	18	pa	0	400	17
Number: 19	Short description	19	pa	0	400	18
Number: 20	Short description	20	pa	0	400	19
Program End	Program ended	00:03:10	time elapsed	0	0	0

19 We will run one more add result

# TESTIT COMPONENTS

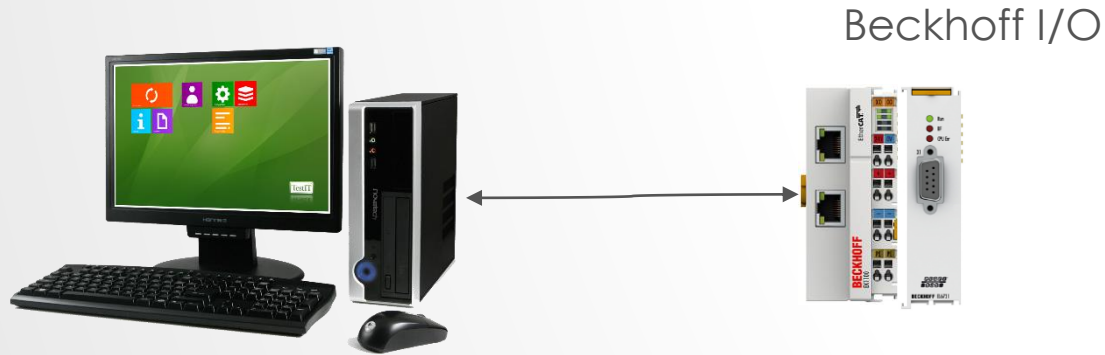


# TESTIT & FESTO



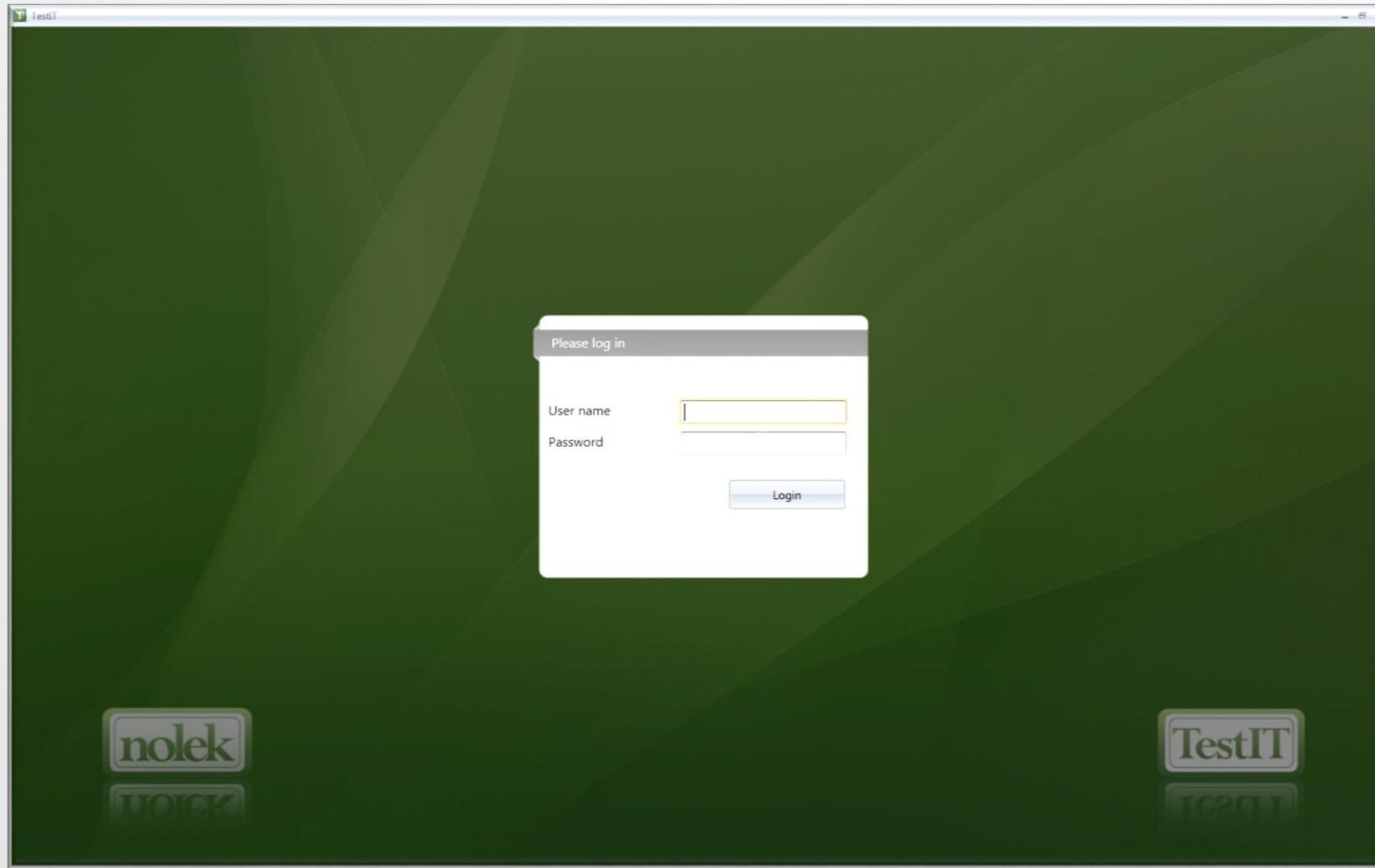
EtherCat	8 x 3/2 ventil	8 DI	8 DO	4 AI 16 bit	2 AO 12 bit	2 x AO 12 bit	4 x AI temp/RTD
X	X	X	X				
X	X	X	X	X			
X	X	X	X	X	X	X	
X	X	X	X	X	X	X	X

# TESTIT & BECKHOFF



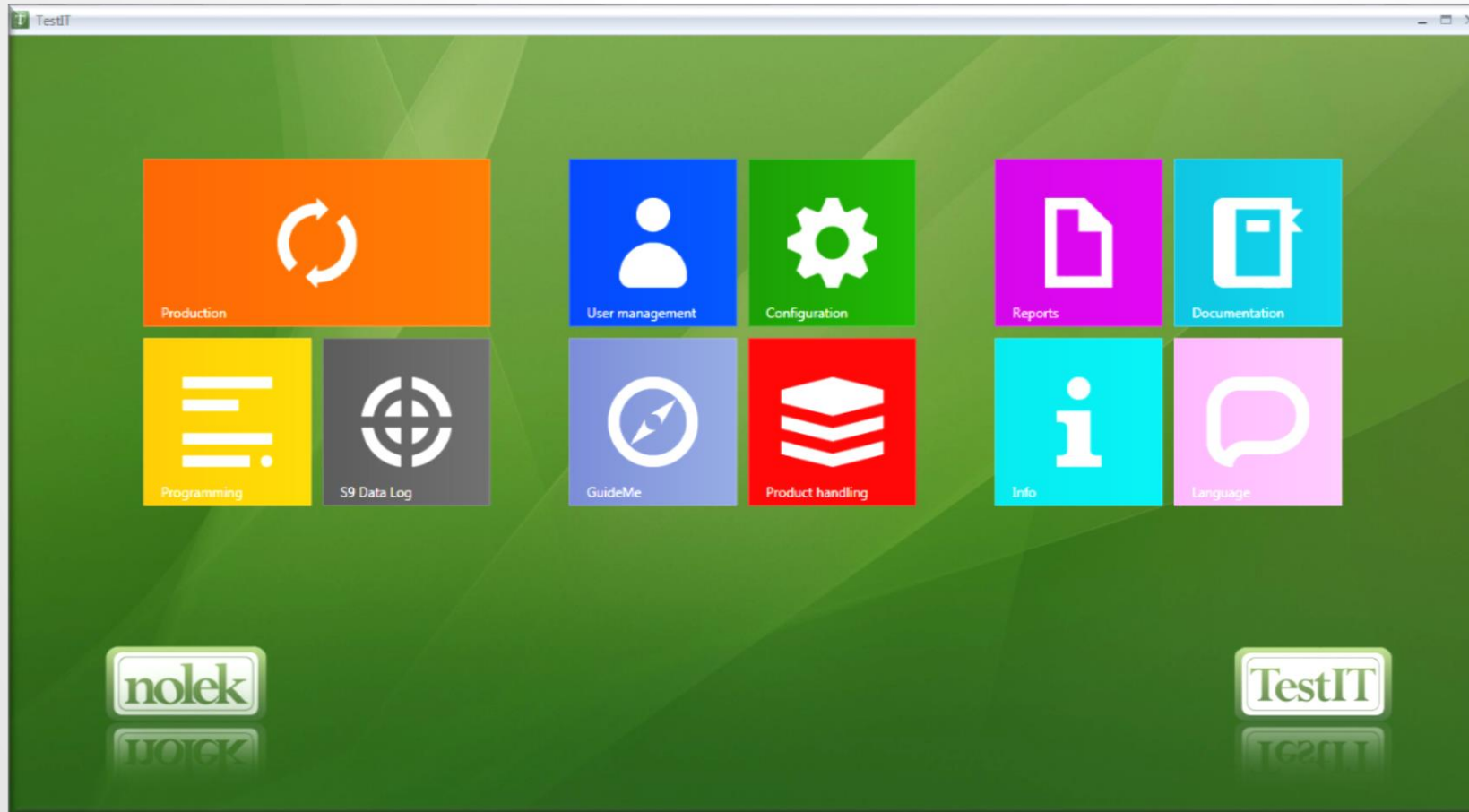
EtherCat EK1100	8 DI EL1008	8 DO EL2008	2 AI 16 bit 4-20mA EL3152	2 AI 16 bit 0-10V EL3162	2 AO 16 bit 4-20mA EL4122	2 AO 16 bit -10 +10V EL4732	Fieldbus	
							Profibus	EL6731
							Profinet IO	EL6631
							DeviceNet	EL6752
							AS-Interface	EL6201
							CANopen	EL6751

# LOG IN





# MAIN



# PROGRAM AREA

The screenshot displays the TestIT software interface, specifically the 'Programming' area. On the left, a 'Functions' sidebar lists various built-in functions such as 'If', 'IfMinMax', 'Wait', 'Sub', 'GoSub', 'Label', 'GoLabel', 'Delay', 'StopTest', and 'NewPart'. Below this, a 'Params' section lists additional functions like 'Misc', 'Display', 'Image', 'Math', 'DateTime', 'Text', 'Files', 'Database', 'Serial', 'Socket', 'S9RS232', 'Laser', and 'Printer'. The main area is titled 'Demo' and contains a toolbar with icons for Program, Execution, Command, Symbols, Program info, and Search. The central pane shows a code editor with the following VBA-style code:

```

28
29 /* 1000 Init - Clear all values ..... */
30 Function.Sub(1000_Init)
31
32 *Show the OK - NOK counter
33 Display.TestCountShow()
34
35 *Add one NOK to the counter
36 Display.TestCountAddOK()
37
38 *Add one NOK to the counter
39 Display.TestCountAddNOK()
40
41 Function.EndSub()
42
43 /* 2000 Home - Setting the system in home position ..... */
44 Function.Sub(2000_Home)
45 Function.EndSub()
46
47 /* 3000 SOP Assembly - Show operator how to assembly ..... */
48 Function.Sub(3000_SOP_Assembly)
49 Function.EndSub()
50
51
52 /* 5000 Test - Make the test could be Pressure, Flow ..... */
53 Function.Sub(5000_Test)
54
55 *Control about the value are between 2 values
56 Function.IfMinMax(8201,1000,2000)
57   Misc.Set(Q301)
58 Function.EndIf()
59
60 * Wait for pressuer high setting
61 Function.Wait(8201,>,1000,10,S,_timeout)
62
63 Function.If( _timeout,=,1)
64   *Do something!
65 Function.EndIf()
66
67 * Time to wait on cylinder
68 Function.Delay(2,5)
69
70 Function.EndSub()
71
72
73 /* 8000 Validate result - control object Ok - NOK ..... */
74 Function.Sub(8000_Validate)
75
76   Misc.ValidateObject(_ValidateResult,_ObjectStatus,$MaxRetest,_CountTest,FlashLight_NOK)
77
78 *Result - Retest chosen.
79   Function.If( _ValidateResult,=,1)
80

```

# PROGRAM DEBUG AREA

The screenshot displays the TestIT software interface, which is used for program debugging. The interface is divided into several main sections:

- Code Editor (Left):** Contains the source code of the program being debugged. The code includes comments and function calls such as `Function.Sub(3000_SOP_Assembly)`, `Function.Sub(5000_Test)`, `Misc.ValidateObject`, and `Function.Delay`. The current line of execution is highlighted in blue.
- Production Info (Center):** A panel for entering production parameters. It includes fields for Product, Program, Batch (201411\_19#0001), Cycle time (00:00:14), and Test Counter OK (1). Below these fields is a table showing the current state of the program:
 

Result name	Description	Result	Unit	Min	Max	Time
Program Start	Program started	0		0	0	0
- Watch List (Right):** A table for monitoring variable values. It shows several variables with their current values and a status icon (a red 'X' in a box):
 

Symbol name	Value	Status
_resultString		✗
_resultInt	0	✗
_resultBool	0	✗
\$MotionsCountBefor...	100	✗
\$RecipeHighPressure	HighPressure	✗
\$RecipeLowPressure	LowPressure	✗
_Low_High	0	✗
- Buttons (Bottom):** A set of control buttons including a red 'X' icon, a 'Retest' button, and an 'OK' button.

# USER

### User details

#### Login info

User name:

Is locked out:

#### Personal information

First name:

Last name:

Phone:

Email:

Comment:

Start in production:

#### History

Is approved:

Created date:

Last login date:


Last password changed date:

Failed password attempt count:

Last lock out date:

#### Role

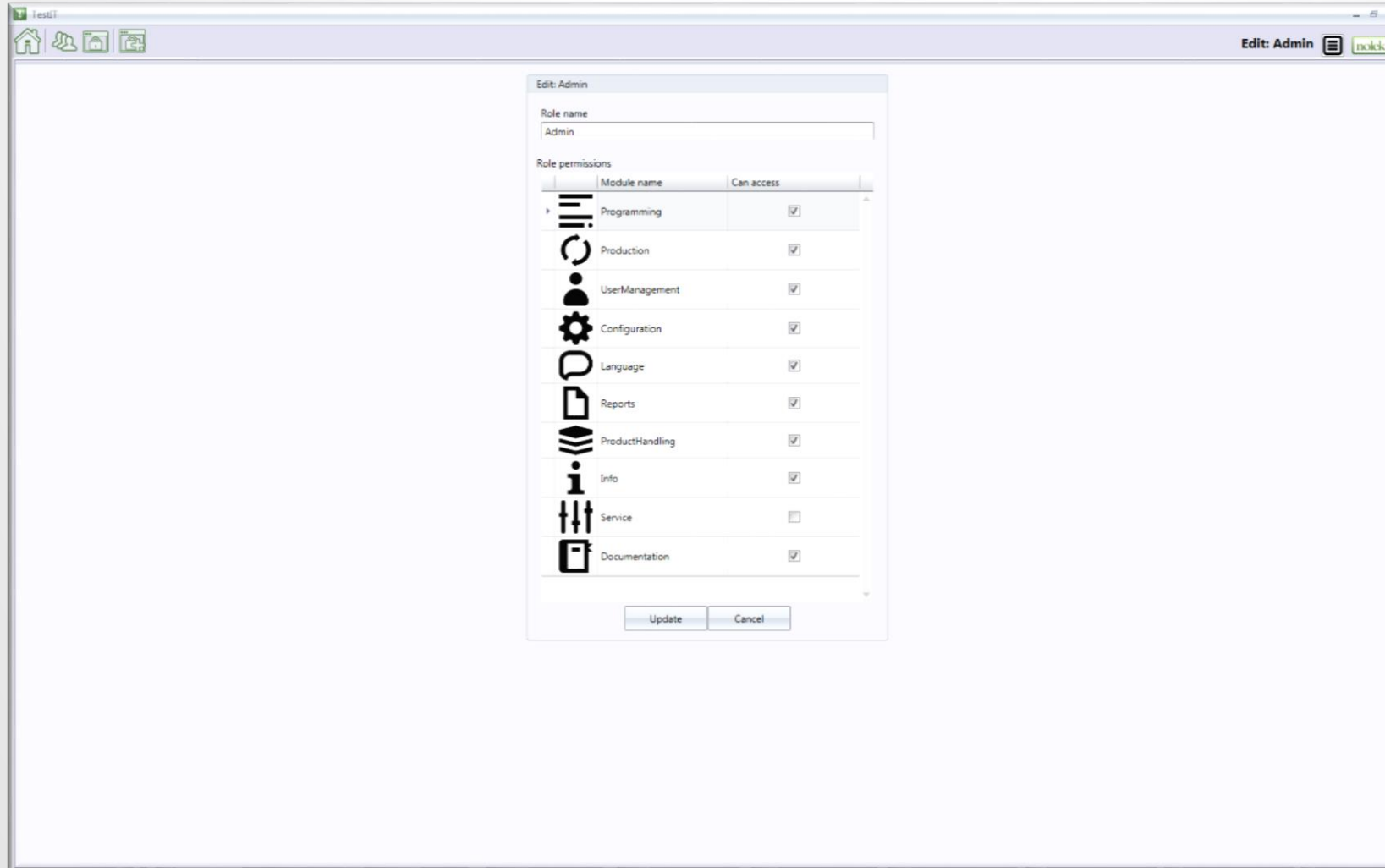
### Image



Remark:

v02

# ROLES

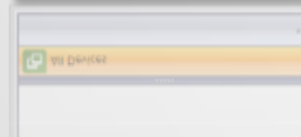
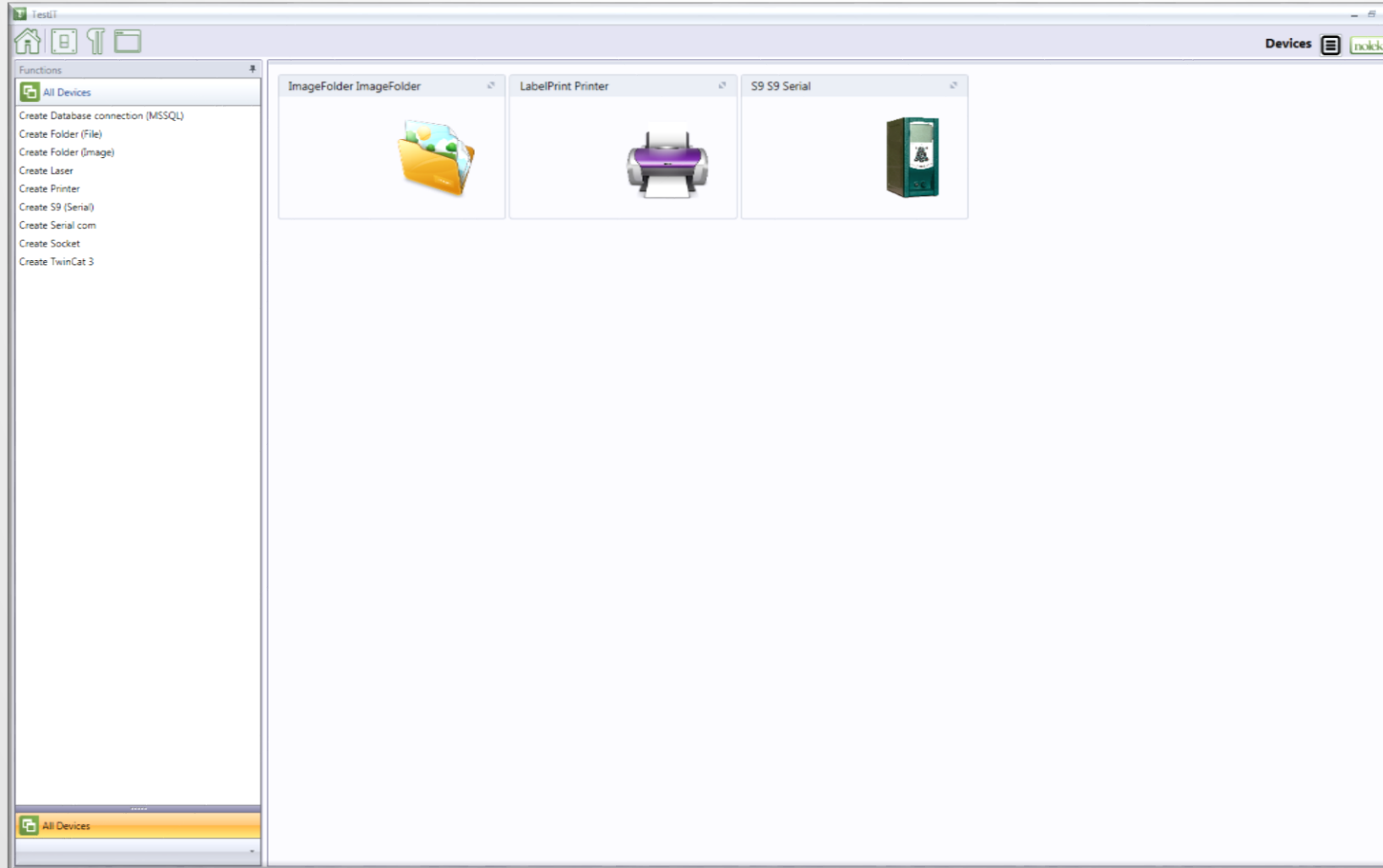


The screenshot displays the 'Edit: Admin' configuration window in the TestIT application. The window title is 'TestIT' and the current user is 'Admin'. The role name is set to 'Admin'. Below this, a table lists the role permissions for various modules. The 'Can access' column indicates whether the role has access to each module.

Module name	Can access
Programming	<input checked="" type="checkbox"/>
Production	<input checked="" type="checkbox"/>
UserManagement	<input checked="" type="checkbox"/>
Configuration	<input checked="" type="checkbox"/>
Language	<input checked="" type="checkbox"/>
Reports	<input checked="" type="checkbox"/>
ProductHandling	<input checked="" type="checkbox"/>
Info	<input checked="" type="checkbox"/>
Service	<input type="checkbox"/>
Documentation	<input checked="" type="checkbox"/>

Buttons for 'Update' and 'Cancel' are located at the bottom of the configuration window.

# DEVICE



# SYMBOL HANDLER

Functions

- Symbol functions
- Add symbol
- Set start symbol
- Set stop symbol
- Set emergency stop symbol
- Set retest symbol
- Set pause symbol
- Set Reset NOK symbol

Devices

Drag a column header here to group by that column

Symbol name	Comment	Unit	Data type	Device Type	Device name	Value	Program sy...		
\$MaxRetest	Max times that the object are allowed to retest		INT			1	<input checked="" type="checkbox"/>		
\$MotionCountBeforeTest	Motions before next test		INT			20	<input checked="" type="checkbox"/>		
\$MotionDelayTimeMS	Time before next motion move in mili sec	ms	INT			1000	<input checked="" type="checkbox"/>		
\$MotionsCountBeforeEnd	Numbers for motions before end		INT			100	<input checked="" type="checkbox"/>		
\$Object_Height	Height of the object	cm	INT			20	<input checked="" type="checkbox"/>		
\$Object_Width	Object width	cm	INT			30	<input checked="" type="checkbox"/>		
\$P_ProductType	Product type - used to the label print		STRING			ConnectIT CI	<input checked="" type="checkbox"/>		
\$RecipeHighPressure			STRING			HighPressure	<input checked="" type="checkbox"/>		
\$RecipeLowPressure			STRING			LowPressure	<input checked="" type="checkbox"/>		
_bool01			BOOL			0	<input type="checkbox"/>		
_CountTest	Count numbers of test		INT			0	<input type="checkbox"/>		
_double01	Internal symbol		DOUBLE			0	<input type="checkbox"/>		
_int01			INT			0	<input type="checkbox"/>		
_int02			INT			0	<input type="checkbox"/>		
_LeakBinSign			STRING				<input type="checkbox"/>		
_LeakValue			INT			0	<input type="checkbox"/>		
_Low_High	Control low = 1 or high = 2 pressure		INT			0	<input type="checkbox"/>		
_MotionActualCount	Total motions		INT			0	<input type="checkbox"/>		
_MotionCount	Motions before next test		DOUBLE			0	<input type="checkbox"/>		
_ObjectStatus	Status of the object		BOOL			0	<input type="checkbox"/>		
_P_CycleTime	Cycle time - used to the label print		INT			2654	<input type="checkbox"/>		
_P_DateTime	Datetime - used to the label print		STRING			2014-05-24...	<input type="checkbox"/>		
_P_SerialNo	Serial no. - used to the label print		STRING			574568745...	<input type="checkbox"/>		
_P01			DOUBLE			0	<input type="checkbox"/>		
_P02			DOUBLE			0	<input type="checkbox"/>		
_P03			DOUBLE			0	<input type="checkbox"/>		
_P05			DOUBLE			0	<input type="checkbox"/>		
_P06			DOUBLE			0	<input type="checkbox"/>		
_resultBool			BOOL			0	<input type="checkbox"/>		
_resultInt			INT			0	<input type="checkbox"/>		
_ResultLong			STRING				<input type="checkbox"/>		

Symbol functions

...			DOUBLE				<input type="checkbox"/>		
...			INT			0	<input type="checkbox"/>		
...			BOOL			0	<input type="checkbox"/>		
...			DOUBLE			0	<input type="checkbox"/>		

# PRODUCT

The screenshot shows a web application window titled "Product handling" with a "nolck" status indicator. The interface features three panels, each with a title bar and a description:

Group for xx product	SVA120	Create Result
Description All product of type xx place them here.	Description Valve of type	Description Create result for demo only



# PRODUCT CREATE-EDIT

**Product**

Name: SVA10  
Description: Product of type SVA  
Active:

**History**  
Created date: 10/28/2014  
Updated date: 10/29/2014

**Product group**  
Group for xx product

**Program**  
Demo

**Program symbols**

Symbol name	Comment	Unit	Symbol type	Value
\$P_ProductType	Product type - used to the...		STRING	ConnectIT CI
\$MaxRetest	Max times that the object...		INT	1
\$Object_Height	Height of the object	cm	INT	20
\$Object_Width	Object width	cm	INT	30

**Image**

Remark  
The optimal image proportion is 6 x 8 portrait. Your image will be cropped if it's not the correct proportion.

Update Cancel Delete Copy

# PRODUCTION

TestIT
noack

Production Info

Symbol na...	Value	Unit
▾ _int01	3	
▾ _string01	Number: 3	
▾ _string02	Number:	

Buttons

Light off

Production

Product  
Create Result

Program  
DemoCreate\_Result

Batch  
201411\_19#0001

Unique ID  
987G3241

Cycle time  
00:00:03

Result name	Description	Result	Unit	Min	Max	Time
Program Start	Program started	0		0	0	0
Number: 1	Short description	1	pa	0	400	0 <span style="color: green;">i</span>
Number: 2	Short description	2	pa	0	400	1 <span style="color: green;">i</span>
▾ Number: 3	Short description	3	pa	0	400	2 <span style="color: green;">i</span>

▾ 3 We will run one more add result ⚠

Start

Stop

# REPORT – ANALYSIS – EXPORT EXCEL

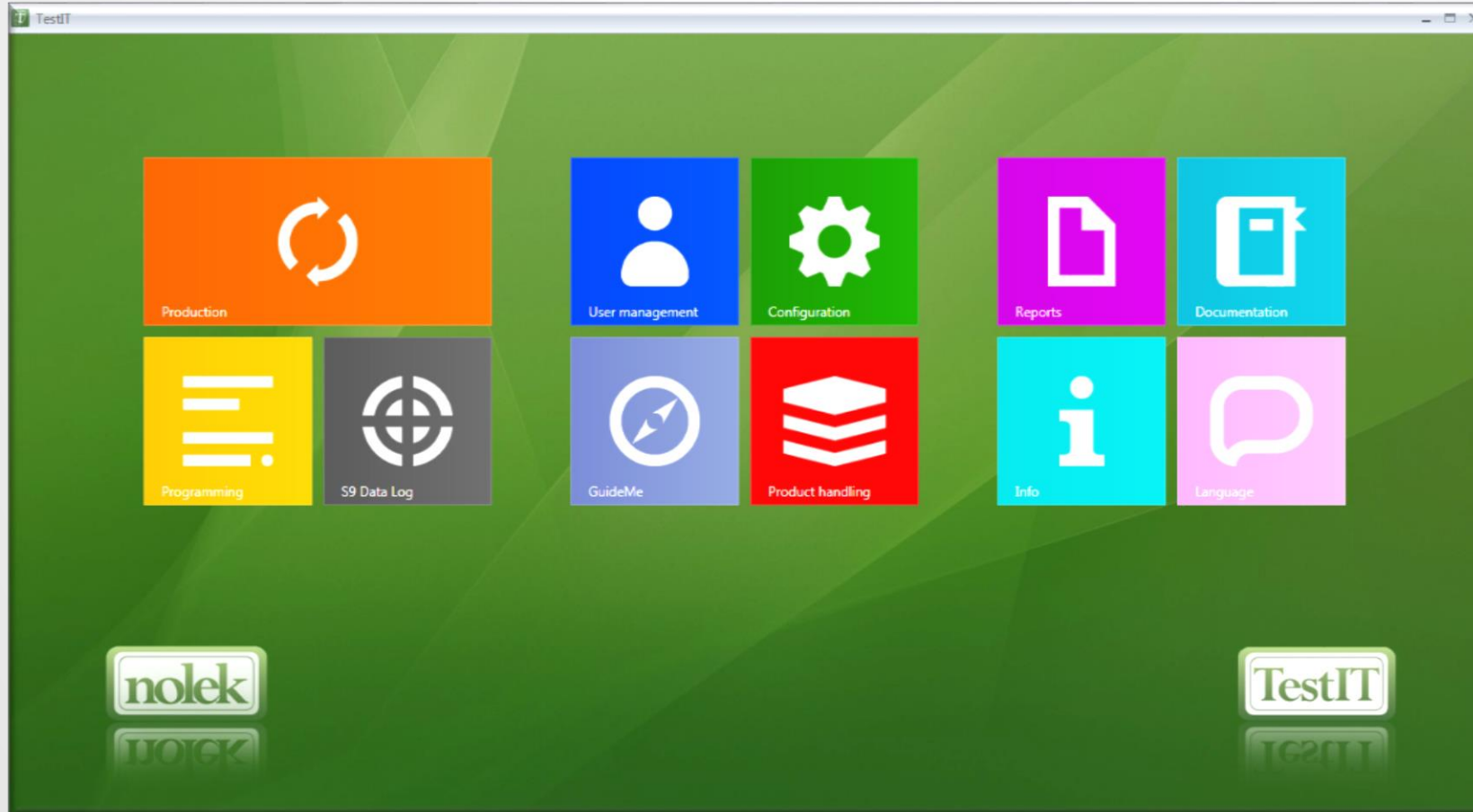
Reports okkk

From: 11/12/2014 To: 11/19/2014 Refresh

Drag a column header here to group by that column

ID	Log No	Product...	Batch No	Object ID	Operator	Date	Time	Result No	Result...	Result...	Result S...	Unit	Min	Max	Result B...	Result Int	Result...	Result F...	Time Sp...	Log Type	Object...	Time St...
81	6	Create...	2014_1...	987G32...	admin	14/11/19	07:41:0...	6	Progra...	Progra...	00:00:20	time ela...	0	0					5	90		11/19/2...
80	6	Create...	2014_1...	987G32...	admin	14/11/19	07:40:5...	6	Numbe...	Short d...	Long d...	6	pa	0	400		6	6	5	50		11/19/2...
79	6	Create...	2014_1...	987G32...	admin	14/11/19	07:40:5...	5	Numbe...	Short d...	Long d...	5	pa	0	400		5	5	4	50		11/19/2...
78	6	Create...	2014_1...	987G32...	admin	14/11/19	07:40:4...	4	Numbe...	Short d...	Long d...	4	pa	0	400		4	4	3	50		11/19/2...
77	6	Create...	2014_1...	987G32...	admin	14/11/19	07:40:4...	3	Numbe...	Short d...	Long d...	3	pa	0	400		3	3	2	50		11/19/2...
76	6	Create...	2014_1...	987G32...	admin	14/11/19	07:40:4...	2	Numbe...	Short d...	Long d...	2	pa	0	400		2	2	1	50		11/19/2...
75	6	Create...	2014_1...	987G32...	admin	14/11/19	07:40:4...	1	Numbe...	Short d...	Long d...	1	pa	0	400		1	1	0	50		11/19/2...
74	6	Create...	2014_1...	987G32...	admin	14/11/19	07:40:4...	6	Progra...	Progra...	0		0	0				0	10		11/19/2...	
73	5	Create...	2014_1...	987G32...	admin	14/11/18	23:00:5...	5	Progra...	Progra...	00:03:10	time ela...	0	0				0	90		11/18/2...	
72	5	Create...	2014_1...	987G32...	admin	14/11/18	23:00:5...	20	Numbe...	Short d...	Long d...	20	pa	0	400		20	20	19	50		11/18/2...
71	5	Create...	2014_1...	987G32...	admin	14/11/18	23:00:3...	19	Numbe...	Short d...	Long d...	19	pa	0	400		19	19	18	50		11/18/2...
70	5	Create...	2014_1...	987G32...	admin	14/11/18	23:00:1...	18	Numbe...	Short d...	Long d...	18	pa	0	400		18	18	17	50		11/18/2...
69	5	Create...	2014_1...	987G32...	admin	14/11/18	23:00:0...	17	Numbe...	Short d...	Long d...	17	pa	0	400		17	17	16	50		11/18/2...
68	5	Create...	2014_1...	987G32...	admin	14/11/18	22:59:4...	16	Numbe...	Short d...	Long d...	16	pa	0	400		16	16	15	50		11/18/2...
67	5	Create...	2014_1...	987G32...	admin	14/11/18	22:59:3...	15	Numbe...	Short d...	Long d...	15	pa	0	400		15	15	14	50		11/18/2...
66	5	Create...	2014_1...	987G32...	admin	14/11/18	22:59:1...	14	Numbe...	Short d...	Long d...	14	pa	0	400		14	14	13	50		11/18/2...
65	5	Create...	2014_1...	987G32...	admin	14/11/18	22:59:0...	13	Numbe...	Short d...	Long d...	13	pa	0	400		13	13	12	50		11/18/2...
64	5	Create...	2014_1...	987G32...	admin	14/11/18	22:58:5...	12	Numbe...	Short d...	Long d...	12	pa	0	400		12	12	11	50		11/18/2...
63	5	Create...	2014_1...	987G32...	admin	14/11/18	22:58:3...	11	Numbe...	Short d...	Long d...	11	pa	0	400		11	11	10	50		11/18/2...
62	5	Create...	2014_1...	987G32...	admin	14/11/18	22:58:2...	10	Numbe...	Short d...	Long d...	10	pa	0	400		10	10	9	50		11/18/2...
61	5	Create...	2014_1...	987G32...	admin	14/11/18	22:58:2...	9	Numbe...	Short d...	Long d...	9	pa	0	400		9	9	8	50		11/18/2...
60	5	Create...	2014_1...	987G32...	admin	14/11/18	22:58:1...	8	Numbe...	Short d...	Long d...	8	pa	0	400		8	8	7	50		11/18/2...
59	5	Create...	2014_1...	987G32...	admin	14/11/18	22:58:0...	7	Numbe...	Short d...	Long d...	7	pa	0	400		7	7	6	50		11/18/2...
58	5	Create...	2014_1...	987G32...	admin	14/11/18	22:57:5...	6	Numbe...	Short d...	Long d...	6	pa	0	400		6	6	5	50		11/18/2...
57	5	Create...	2014_1...	987G32...	admin	14/11/18	22:57:5...	5	Numbe...	Short d...	Long d...	5	pa	0	400		5	5	4	50		11/18/2...
56	5	Create...	2014_1...	987G32...	admin	14/11/18	22:57:5...	4	Numbe...	Short d...	Long d...	4	pa	0	400		4	4	3	50		11/18/2...
55	5	Create...	2014_1...	987G32...	admin	14/11/18	22:57:4...	3	Numbe...	Short d...	Long d...	3	pa	0	400		3	3	2	50		11/18/2...
54	5	Create...	2014_1...	987G32...	admin	14/11/18	22:57:4...	2	Numbe...	Short d...	Long d...	2	pa	0	400		2	2	1	50		11/18/2...
53	5	Create...	2014_1...	987G32...	admin	14/11/18	22:57:4...	1	Numbe...	Short d...	Long d...	1	pa	0	400		1	1	0	50		11/18/2...
52	5	Create...	2014_1...	987G32...	admin	14/11/18	22:57:4...	5	Progra...	Progra...	0		0	0				0	10		11/18/2...	
51	4	Create...	2014_1...	987G32...	admin	14/11/18	22:51:4...	4	Progra...	Progra...	00:03:10	time ela...	0	0				0	90		11/18/2...	
50	4	Create...	2014_1...	987G32...	admin	14/11/18	22:51:4...	20	Numbe...	Short d...	Long d...	20	pa	0	400		20	20	19	50		11/18/2...
49	4	Create...	2014_1...	987G32...	admin	14/11/18	22:51:2...	19	Numbe...	Short d...	Long d...	19	pa	0	400		19	19	18	50		11/18/2...
48	4	Create...	2014_1...	987G32...	admin	14/11/18	22:51:0...	18	Numbe...	Short d...	Long d...	18	pa	0	400		18	18	17	50		11/18/2...
47	4	Create...	2014_1...	987G32...	admin	14/11/18	22:50:5...	17	Numbe...	Short d...	Long d...	17	pa	0	400		17	17	16	50		11/18/2...
46	4	Create...	2014_1...	987G32...	admin	14/11/18	22:50:3...	16	Numbe...	Short d...	Long d...	16	pa	0	400		16	16	15	50		11/18/2...

# QUESTIONS



# THANKS



- Leak Testing -

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