

Application notes

VVTS Advanced Setup version 3.00.01

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Introduction

ViTrox Verification Tool Solution (VVTs) is the Repair GUI for the V510. In VVTs, users can:

- Use the information to decide whether the inspection call is a real defect.
- Save the repair actions performed and other related information.
- Flag defects for repair later when tools or capabilities are not immediately available.
- Access test data from the test and inspection process.

Many users request to have certain level of control for the VVTs. **VVTs Advance Setup** is created to halt the VVTs operation if there is certain consecutive fails appeared during the VVTs repair action. This halting system is created to ease user to verify the root cause of the consecutive failures during VVTs operation.

Setup

Allocate **VVTsControlSetup.exe** file in <C:\Program Files\RepairTool>.

Starting the VVTs Advance Setup

Logging In:



Figure 1 VVTs Advanced Setup Icon

- I. Launch VVTs Advanced Setup by clicking on VVTs Advance Setup icon on the desktop.
- II. Log-in to the system. For first time login, please use the username and password provided by ViTrox representative.
Note: Please refer to ViTrox representative if there is any problem with the first time login.
- III. Once user is logged in, VVTs Advanced Setup will display the work page.



Figure 2 Login Page for VVTs Advanced Setup

Logging Out:

Log out by clicking on **Logout** button.



Figure 3 Log Out

GUI of VVTs Advanced Setup



Figure 4 GUI of VVTs Advanced Setup

Page

Provide easy and quick access to GUI which have similar working mode.






 Settings	Settings – a page to display all the application related settings.
 Ref Des	Ref Des – a page to display the Reference Designator checking page.
 Defect	Defect – a page to display the defect checking page.
 Conditions	Conditions – a page to display VVTS screen lock conditions.
 Logout	Logout – a page for user to login and logout the system.

Table 1 Page GUI

Settings Page

To control defect types.

Board Type	Ref Des	Match Whole Words	Device Type	Package	Part Number	Defect	Chinese	Password	Quantity	Consecutive	Control	Status	Counting	False/True Cal	Hour(s)	Pre/Post	Reset Time
All	All	No	All	All	All	Missing	缺少	No	0	No	On	Normal	0	None	-	Post	2016-11-08-08-44-56
All	All	No	All	All	All	Bridging	桥	No	0	No	Off	Normal	0	None	-	Post	2016-11-08-08-44-56
All	All	No	All	All	All	Right off	右移动	No	0	No	Off	Normal	0	None	-	Post	2016-11-08-08-44-56

Figure 5 Settings Page

a) Board type

- Repair action in VVTS repair tool will stop based on the board type.
- The input field is a text field. Double click to enter/ edit the data. The default setting is 'All' when no input is given by user.

Example:

- In VVTS Advanced Setup window, set the board type as 'DemoBoard'. Set the Defect as 'Missing' and select Control as 'On'.
- Click 'Save'.
- Then, close the VVTS Advanced Setup window and open VVTS repair tool.
- In this case, alarm will be triggered if there is any component in 'DemoBoard' which is failed as 'Missing'.
- Administrator needs to key in password to continue the buy off process.

Board Type	Ref Des	Match Whole Words	Device Type	Package	Part Number	Defect	Chinese	Password	Quantity	Consecutive	Control	Status	Counting	False/True Call	Hour(s)	Pre/Post	Reset Time
DemoBoard	All	No	All	All	All	Missing	缺少	No	0	No	On	Normal	0	None	-	Post	2016-11-08-09-18-40

Figure 6 Key in Board Type

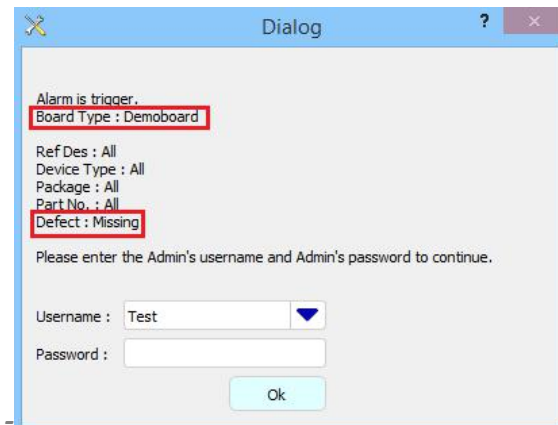


Figure 7 Alarm Triggered for Verification according to Board Type

b) Ref Des

- Repair action in VVTS repair tool will stop based on the 'Ref Des' name.
- The input field is a text field. Double click to enter/ edit the data. The default setting is 'All' when no input is given by user.

Example:

- In VVTS Advanced Setup window, set the Ref Des as '2:c15'. Set the Defect as 'Missing' and select Control as 'On'.
- Click 'Save'.
- Then, close the VVTS Advanced Setup window and open VVTS repair tool.
- In this case, alarm will be triggered if there is any component in '2:c15' failed as 'Missing'.
- Administrator needs to key in password to continue the buy off process.

Board Type	Ref Des	Match Whole Words	Device Type	Package	Part Number	Defect	Chinese	Password	Quantity	Consecutive	Control	Status	Counting	False/True Call	Hour(s)	Pre/Post	Reset Time
All	2:c15	No	All	All	All	Missing	缺少	No	0	No	On	Normal	0	None	-	Post	2016-11-08-09:31:54

Figure 8 Key in Ref Des

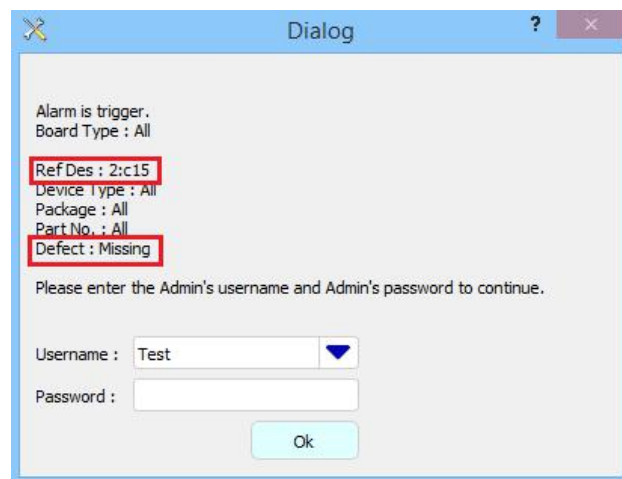


Figure 9 Alarm Triggered for Verification according to Ref Des

c) Match Whole Words

- Drop down list; 'Yes' and 'No'. Default setting is 'No'.
- Yes: Search for whole words or cells that are **identical** to the search text.

Note: Only applicable for Ref Des

Example:

- 2:c15. Alarm will trigger for Ref Des board 2:c15 only.
- No: Search for whole words or cells that are **similar** to the search for text.

Example:

- c15. Alarm will be triggered for any board with Ref Des c15.

Board Type	Ref Des	Match Whole Words	Device Type	Package	Part Number	Defect	Chinese	Password	Quantity	Consecutive	Control	Status	Counting	False/True Call	Hour(s)	Pre/Post	Reset Time
All	2:c15	Yes	All	All	All	Missing	缺少	No	0	No	On	Normal	0	None	-	Post	2016-11-08-10-00-03
All	c15	No	All	All	All	Missing	缺少	No	0	No	On	Normal	0	None	-	Post	2016-11-08-10-00-03

Figure 10 Match Whole Words

d) Device Type

- Repair action in VVTS repair tool will be stopped based on the device type.
- The input field is a text field. Double click to enter/ edit the data. The default setting is 'All' when no input is given by user.

Example:

- In VVTS Advanced Setup window, set the Device Type as 'ccap0805'. Set the Defect as 'Missing' and select Control as 'On'.
- Click 'Save'.
- Then, close the VVTS Advanced Setup window and open VVTS repair tool.
- In this case, alarm will be triggered if a component with device type 'ccap0805' failed as 'Missing'.
- Administrator needs to key in password to continue the buy off process.

Board Type	Ref Des	Match Whole Words	Device Type	Package	Part Number	Defect	Chinese	Password	Quantity	Consecutive	Control	Status	Counting	False/True Call	Hour(s)	Pre/Post	Reset Time
All	All	No	ccap0805	All	All	Missing	缺少	No	0	No	On	Normal	0	None	-	Post	2016-11-08-09-35-05

Figure 11 Key in Device Type

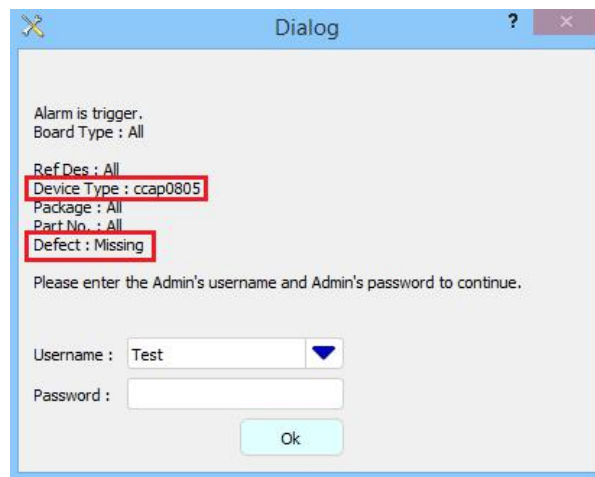


Figure 12 Alarm Triggered for Verification according to Device Type

e) Package

- Repair action in VVTS repair tool will be stopped based on the package name.
- The input field is a text field. Double click to enter/ edit the data. The default setting is 'All' when no input is given by user.

Example:

- In VVTS Advanced Setup window, set the package as 'SHAPE'. Set the Defect as 'Missing' and select Control as 'On'.
- Click 'Save'.
- Then, close the VVTS Advanced Setup window and open VVTS repair tool.
- In this case, alarm will be triggered if a component with package name 'SHAPE' failed as 'Missing'.
- Administrator needs to key in password to continue the buy off process.

Board Type	Ref Des	Match Whole Words	Device Type	Package	Part Number	Defect	Chinese	Password	Quantity	Consecutive	Control	Status	Counting	False/True Call	Hour(s)	Pre/Post	Reset Time
All	All	No	All	SHAPE	All	Missing	缺少	No	0	No	On	Normal	0	None	-	Post	2016-11-08-10-05-08

Figure 13 Key in Package Name

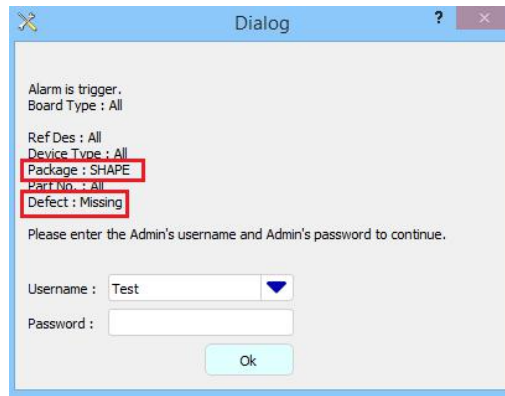


Figure 14 Alarm Triggered for Verification according to Package

f) Part Number

- Repair action in VVTS repair tool will be stopped based on the part number.
- The input field is a text field. Double click to enter/ edit the data. The default setting is 'All' when no input is given by user.

Example:

- In VVTS Advanced Setup window, set the Part Number as '0402-C'. Set the Defect as 'Missing' and select Control as 'On'.
- Click 'Save'.
- Then, close the VVTS Advanced Setup window and open VVTS repair tool.
- In this case, alarm will be triggered if a component with part number '0402-C' failed as 'Missing'.
- Administrator needs to key in password to continue the buy off process.

Board Type	Ref Des	Match Whole Words	Device Type	Package	Part Number	Defect	Chinese	Password	Quantity	Consecutive	Control	Status	Counting	False/True Cal	Hour(s)	Pre/Post	Reset Time
All	All	No	All	All	0402-C	Missing	缺少	No	0	No	On	Normal	0	None	-	Post	2018-04-10-14-56-20

Figure 15 Key in Part Number

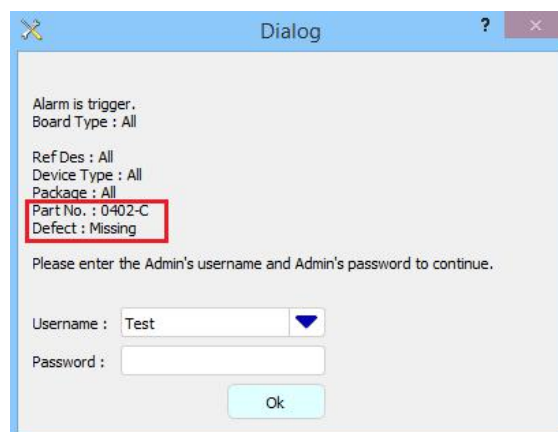


Figure 16 Alarm Triggered for Verification according to Part Number

g) Defect

- Repair action in VVTS repair tool will be stopped based on the defect types.
- The input field is a text field. Double click to enter/ edit the data. The default setting is 'unknown' when no input is given by user.

Note: Defect is mandatory field to trigger alarm.

Example:

- In VVTS Advanced Setup window, set the defect type as 'Missing' and select Control as 'On'.
- Click 'Save'.
- Then, close the VVTS Advanced Setup window and open VVTS repair tool.
- In this case, alarm will be triggered if there is any component failed as 'Missing'.
- Administrator needs to key in password to continue the buy off process.

Board Type	Ref Des	Match Whole Words	Device Type	Package	Part Number	Defect	Chinese	Password	Quantity	Consecutive	Control	Status	Counting	False/True Call	Hour(s)	Pre/Post	Reset Time
All	All	No	All	All	All	Missing	缺少	No	0	No	On	Normal	0	None	-	Post	2016-11-08-11-06-39

Figure 17 Key in Defect Type

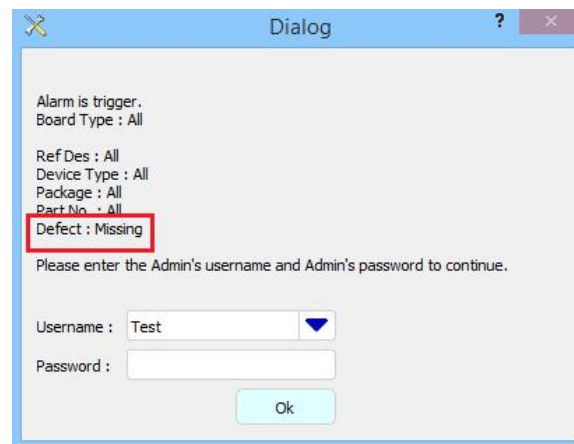


Figure 18 Alarm Triggered for Verification according to Defect Type

h) Chinese

- Shows the defect name in Chinese translation.
- The input field is a text field. Double click to enter/ edit the data. The default setting is 'unknown'.

Note: Chinese field is used to only show the translation and has no impact on repair action in VVTS Repair Tool.

Board Type	Ref Des	Match Whole Words	Device Type	Package	Part Number	Defect	Chinese	Password	Quantity	Consecutive	Control	Status	Counting	False/True Call	Hour(s)	Pre/Post	Reset Time
All	All	No	All	All	All	Missing	缺少	No	0	No	On	Normal	0	None	-	Post	2016-11-08-13-40-37
All	All	No	All	All	0201-CF100	Missing	缺少	No	0	No	Off	Normal	0	None	-	Post	2016-11-08-13-40-37
All	All	No	ccap0805	SHAPE	All	Right off	右移动	No	0	No	Off	Normal	0	None	-	Post	2016-11-08-13-40-37
All	All	No	All	All	All	Bridging	桥	No	0	No	Off	Normal	0	None	-	Post	2016-11-08-13-40-37

Figure 19 Defect Name in Chinese Translation

i) Password

- To halt the buy off process when the repair action needs to be verified by administrator or engineer.
- Drop down list; 'Yes' and 'No'. Default setting is 'No'.
- No: Off the password setting, no verification process will be done; VVTS will proceed the buy off process.
- Yes: On the password setting, repair action will be halted to wait for the verification process.

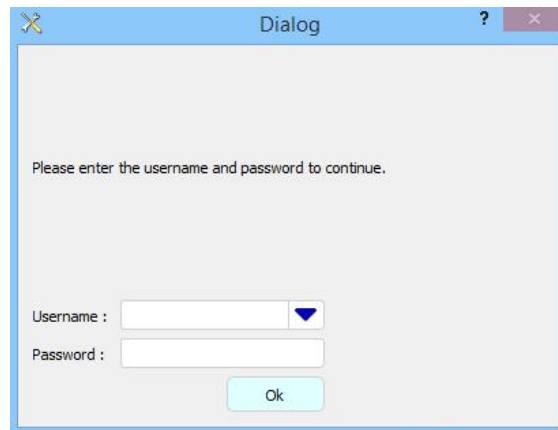
Example:

- In VVTS advanced setup window, select Password as 'Yes' and set Defect as 'Missing'.
- Click 'Save'.
- Then, close the VVTS advanced setup window and open VVTS repair tool.
- In this case, the buy off process will be halted for verification for component in 'Missing'.
- Administrator or engineer has to key in the user-name and password in order to continue the buy off process.

Note: Only the settings that are before Password (on the left) are applicable to password verification. All the other settings after Password (on the right) are not applicable to password verification.

Board Type	Ref Des	Match Whole Words	Device Type	Package	Part Number	Defect	Chinese	Password	Quantity	Consecutive	Control	Status	Counting	False/True Call	Hour(s)	Pre/Post	Reset Time
All	All	No	All	All	All	Missing	缺少	Yes	0	No	Off	Normal	0	None	-	Post	2016-11-08-14-11-43
All	All	No	All	All	All	Missing	缺少	No	0	No	Off	Normal	0	None	-	Post	2016-11-08-14-11-43

Figure 20 Password Setting



Dialog

Please enter the username and password to continue.

Username :

Password :

Ok

Figure 21 Repair Action halt for Verification

Board Type	Ref Des	Match Whole Words	Device Type	Package	Part Number	Defect	Chinese	Password	Quantity	Consecutive	Control	Status	Counting	False/True Call	Hour(s)	Pre/Post	Reset Time
All	All	No	All	All	All	Missing	缺少	Yes	0	No	Off	Normal	0	None	-	Post	2016-11-08-14-11-43

Figure 22 Settings Applicable to Password

j) Quantity

- To trigger alarm as defined number of counts.
- The input field is a text field. Double click to enter/ edit the data. The default setting is '0'.

Note: The Quantity field only accepts numbers. Checking is done to revert any alphabets and special characters entered to zero when Save prompt is closed.

Example:

- In VVTS advanced setup window, set the Quantity as '3'. Set the Defect as 'Missing' and select Control as 'On'.
- Click 'Save'.
- Then, close the VVTS advanced setup window and open VVTS repair tool.
- In this case, the alarm will be triggered if the component failed in 'Missing for the 3rd time.
- Administrator or engineer has to key in the user-name and password at the 3rd buy off in order to continue the buy off process.

Board Type	Ref Des	Match Whole Words	Device Type	Package	Part Number	Defect	Chinese	Password	Quantity	Consecutive	Control	Status	Counting	False/True Call	Hour(s)	Pre/Post	Reset Time
All	All	No	All	All	All	Missing	缺少	No	3	No	On	Normal	0	None	-	Post	2016-11-08-15-36-51

Figure 23 Set the Quantity

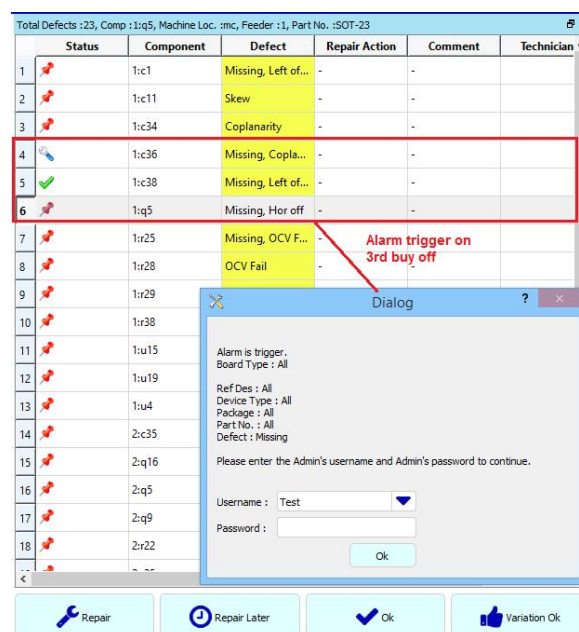


Figure 24 Alarm Triggered for Verification according to Quantity

k) Consecutive

- To halt for verification as defined number of Quantity consecutively.
- Drop down list; 'Yes' and 'No'. Default setting is 'No'.
- No: Ignore the consecutive fails. VVTS repair action will continue the buy off process.
- Yes: Counting for the consecutive fails will take action. VVTS repair action will be halted for the verification process if there is consecutive fails.

Example:

- In VVTS advanced setup window, set the Quantity as '3' and select 'Yes' for Consecutive.
- Set the Defect as 'Missing' and select Control as 'On'.
- Click 'Save'.
- Then, close the VVTS advanced setup window and open VVTS repair tool.
- In this case, the alarm will be triggered if the component failed in 'Missing' for the 3rd consecutive time (repetitive true call).
- Administrator or engineer has to key in the user-name and password at the 3rd consecutive buy off in order to continue the buy off process.

Note: Consecutive setting is only applicable for 'None' in True/False Call setting. The buy off process in VVTS is based on True Call count only and any False Call buy off will break and restart the count.

Board Type	Ref Des	Match Whole Words	Device Type	Package	Part Number	Defect	Chinese	Password	Quantity	Consecutive	Control	Status	Counting	False/True Call	Hour(s)	Pre/Post	Reset Time
All	All	No	All	All	All	Missing	缺少	No	3	Yes	On	Normal	0	None	-	Post	2016-11-08-15-03-57

Figure 25 Select Consecutive

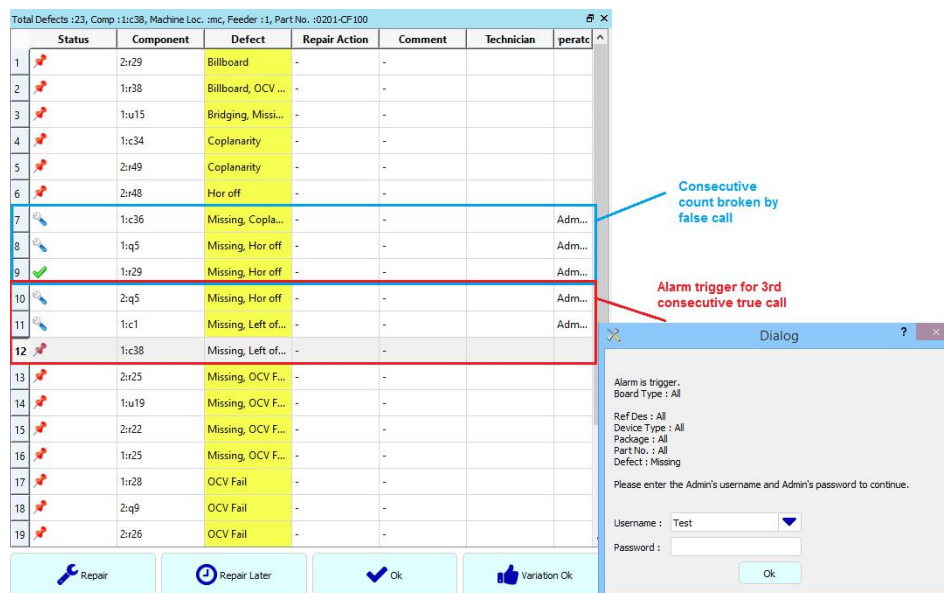


Figure 26 Alarm Triggered for Verification according to Consecutive

I) Control

- To control the counting setting.
- Drop down list; 'On' and 'Off'. Default setting is 'Off'.
- Off: To off the alarm trigger and counting setting.
- On: To on the alarm trigger and counting setting.

Board Type	Ref Des	Match Whole Words	Device Type	Package	Part Number	Defect	Chinese	Password	Quantity	Consecutive	Control	Status	Counting	False/True Call	Hour(s)	Pre/Post	Reset Time
All	All	No	All	All	All	Missing	缺少	No	3	No	On	Normal	0	None	-	Post	2016-11-08-15-49-50
All	All	No	All	All	All	Missing	缺少	No	0	No	Off	Normal	0	None	-	Post	2016-11-08-15-49-50

Figure 27 Control Setting

m) Status

- Show the status of the VVTS repair tool.
- Green color = 'Normal' status.
- Red color = Alarm has been triggered.

Note: Red color is an assumption as it cannot be observed due to VVTS must be closed before VVTS advanced setup is opened. Therefore, user will only observe Green color when VVTS advanced setup is opened.

Board Type	Ref Des	Match Whole Words	Device Type	Package	Part Number	Defect	Chinese	Password	Quantity	Consecutive	Control	Status	Counting	False/True Call	Hour(s)	Pre/Post	Reset Time
All	All	No	All	All	All	Missing	缺少	No	3	No	On	Normal	0	None	-	Post	2016-11-08-15-49-50
All	All	No	All	All	All	Missing	缺少	No	0	No	Off	Normal	0	None	-	Post	2016-11-08-15-49-50

Figure 28 Status

n) Counting

- Show figure of counter which is controlled by 'Quantity' setting.

Example:

- The number of counting = 2 when there are components with same defect were failed two times.
- The number of counting will be counted until the third time and alarm will be triggered. Once alarm is triggered, the counter will reset to zero.

Note: The count will be saved even if board is not finish buy off.

Board Type	Ref Des	Match Whole Words	Device Type	Package	Part Number	Defect	Chinese	Password	Quantity	Consecutive	Control	Status	Counting	False/True Call	Hour(s)	Pre/Post	Reset Time
All	All	No	All	All	All	Missing	缺少	No	3	No	On	Normal	2	None	-	Post	2016-11-08-15-49-50

Figure 29 Counting

Board Type	Ref Des	Match Whole Words	Device Type	Package	Part Number	Defect	Chinese	Password	Quantity	Consecutive	Control	Status	Counting	False/True Call	Hour(s)	Pre/Post	Reset Time
All	All	No	All	All	All	Missing	缺少	No	3	No	On	Normal	0	None	-	Post	2016-11-08-15-49-50

Figure 30 Counter Reset

o) False/ True Call

- Repair action in VVTS repair tool will stop based on the call type.
- Drop down list; 'None' 'False Call' and 'True Call'. Default setting is 'None'.
- None: To save count and trigger alarm with False Call and True Call.
- False Call: To save count and trigger alarm with only with False Call.
- True Call: To save count and trigger alarm with only with True Call.

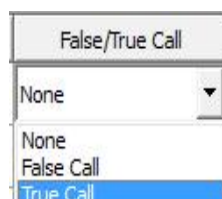


Figure 31 False/True Call drop down List

Example:

i. None

- In VVTS advanced setup window, select False/True Call as 'None'. Set Defect as 'Missing' and select 'On' for Control.
- Click 'Save'.
- Then, close the VVTS advanced setup window and open VVTS repair tool.
- In this case, the alarm will be triggered if the components buy off as True Call or False Call in 'Missing'.
- Administrator or engineer has to key in the user-name and password in order to continue the buy off process.

Note: The count will not save buy off defects that have been buy off previously.

Board Type	Ref Des	Match Whole Words	Device Type	Package	Part Number	Defect	Chinese	Password	Quantity	Consecutive	Control	Status	Counting	False/True Call	Hour(s)	Pre/Post	Reset Time
All	All	No	All	All	All	Missing	缺少	No	0	No	On	Normal	0	None	-	Post	2016-11-09-10-01-30

Figure 32 Select None

Total Defects :23, Comp :1:c1, Machine Loc. :mc, Feeder :1, Part No. :0402-C

Status	Component	Defect	Repair Action	Comment	Technician	Operator
5	1:c34	Coplanarity	-	-		
6	2:r48	Hor off	-	-		
7	1:c36	Missing, Copla...	-	-	Test	Admin:[s]
8	2:q5	Missing, Hor off	-	-	Test	Admin:[s]
9	1:q5	Missing, Hor off	-	-	Test	Admin:[s]
10	1:r29	Missing, Hor off	-	-	Test	Admin:[s]
11	1:c1	Missing, Left of...	-	-		
12	1:c38	Missing, Left of...	-	-		
13	2:r25	Missing, OCV F...	-	-		
14	1:u19	Missing, OCV F...	-	-		
15	2:r22	Missing, OCV F...	-	-		
16	1:r25	Missing, OCV F...	-	-		
17	2:q9	OCV Fail	-	-		
18	2:r26	OCV Fail	-	-		
19	1:r28	OCV Fail	-	-		
20	1:u4	Polarity	-	-		
21	2:q16	Right off	-	-		
22	1:c11	Skew	-	-		
23	2:c35	Skew, Coplanar...	-	-		

Alarm trigger for true and false call

Dialog

Alarm is trigger.
Board Type : All

Ref Des : All
Device Type : All
Package : All
Part No. : All
Defect : Missing

Please enter the Admin's username and Admin's password to continue.

Username : Test

Password :

Ok

Repair Repair Later Ok Variation Ok

Figure 33 Alarm Triggered for Verification according to None setting

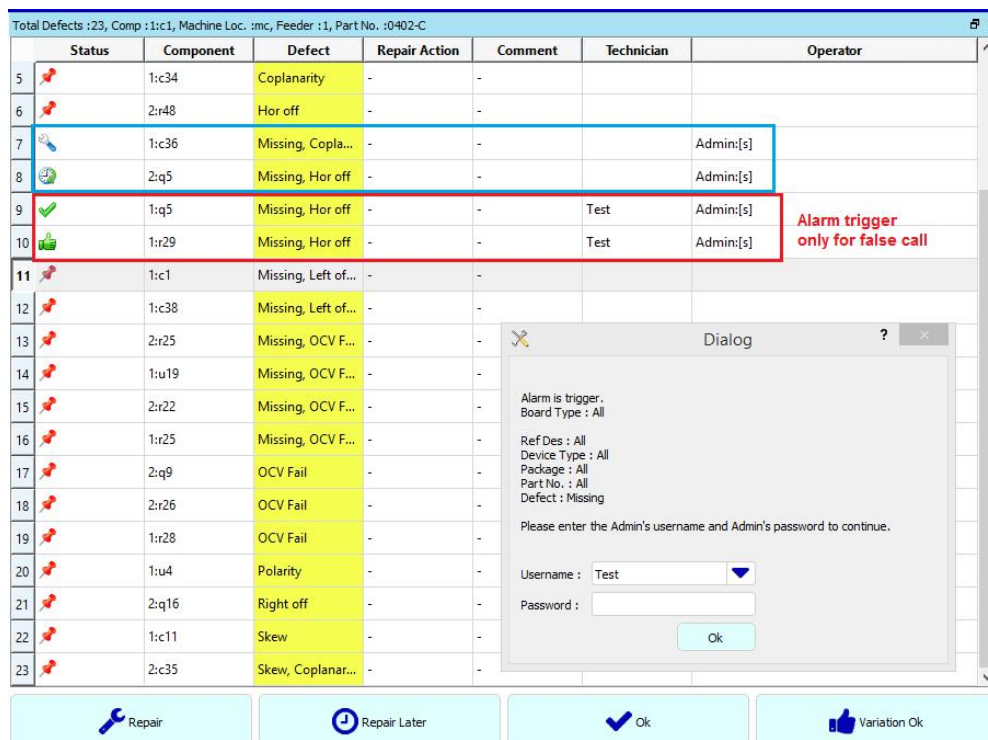
ii. False Call

- In VVTS advanced setup window, select False/True Call as 'False Call'. Set Defect as 'Missing' and select 'On' for Control.
- Click 'Save'.
- Then, close the VVTS advanced setup window and open VVTS repair tool.
- In this case, the alarm will be triggered if the components buy off as False Call in 'Missing'.
- Administrator or engineer has to key in the user-name and password in order to continue the buy off process.

Note: The count will save buy off defects that have been buy off previously when the repair action is changed from True Call to False Call.

Board Type	Ref Des	Match Whole Words	Device Type	Package	Part Number	Defect	Chinese	Password	Quantity	Consecutive	Control	Status	Counting	False/True Call	Hour(s)	Pre/Post	Reset Time
All	All	No	All	All	All	Missing	缺少	No	0	No	On	Normal	0	False Call	-	Post	2016-11-09-10-01-30

Figure 34 Select False Call



The screenshot shows the VVTS repair tool interface. At the top, a status bar indicates 'Total Defects : 23, Comp : 1:c1, Machine Loc. : mc, Feeder : 1, Part No. : 0402-C'. Below this is a table with columns: Status, Component, Defect, Repair Action, Comment, Technician, and Operator. The table lists 23 defects, with rows 9 and 10 highlighted in red. Row 9 shows a 'Missing, Hor off' defect for component '1:q5' with a 'Test' repair action. Row 10 shows a 'Missing, Hor off' defect for component '1:r29' with a 'Test' repair action. To the right of the table, a red text box says 'Alarm trigger only for false call'. A dialog box titled 'Dialog' is open in the foreground, displaying the message: 'Alarm is trigger. Board Type : All. RefDes : All. Device Type : All. Package : All. Part No. : All. Defect : Missing. Please enter the Admin's username and Admin's password to continue.' The dialog box has input fields for 'Username' (with 'Test' entered) and 'Password', and an 'Ok' button. At the bottom of the interface, there are four buttons: 'Repair', 'Repair Later', 'Ok', and 'Variation Ok'.

Figure 35 Alarm Triggered for Verification according to False Call Setting

iii. True Call

- In VVTS advanced setup window, select False/True Call as 'True Call'. Set Defect as 'Missing' and select 'On' for Control.
- Click 'Save'.
- Then, close the VVTS advanced setup window and open VVTS repair tool.
- In this case, the alarm will be triggered if the components buy off as True Call in 'Missing'.
- Administrator or engineer has to key in the user-name and password in order to continue the buy off process.

Note: The count will save buy off defects that have been buy off previously when the repair action is changed from False Call to True Call.

Board Type	Ref Des	Match Whole Words	Device Type	Package	Part Number	Defect	Chinese	Password	Quantity	Consecutive	Control	Status	Counting	False/True Call	Hour(s)	Pre/Post	Reset Time
All	All	No	All	All	All	Missing	缺少	No	0	No	On	Normal	0	True Call	-	Post	2016-11-09-10-01-30

Figure 36 Select True Call

Total Defects :23, Comp :1:c1, Machine Loc. :mc, Feeder :1, Part No. :0402-C

Status	Component	Defect	Repair Action	Comment	Technician	Operator
5	1:c34	Coplanarity	-	-		
6	2:r48	Hor off	-	-		
7	1:c36	Missing, Copla...	-	-		Admin:[s]
8	2:q5	Missing, Hor off	-	-		Admin:[s]
9	1:q5	Missing, Hor off	-	-	Test	Admin:[s]
10	1:r29	Missing, Hor off	-	-	Test	Admin:[s]
11	1:c1	Missing, Left of...	-	-		
12	1:c38	Missing, Left of...	-	-		
13	2:r25	Missing, OCV F...	-	-		
14	1:u19	Missing, OCV F...	-	-		
15	2:r22	Missing, OCV F...	-	-		
16	1:r25	Missing, OCV F...	-	-		
17	2:q9	OCV Fail	-	-		
18	2:r26	OCV Fail	-	-		
19	1:r28	OCV Fail	-	-		
20	1:u4	Polarity	-	-		
21	2:q16	Right off	-	-		
22	1:c11	Skew	-	-		
23	2:c35	Skew, Coplanar...	-	-		

Alarm trigger only for true call

Dialog

Alarm is trigger.
Board Type : All

Ref Des : All
Device Type : All
Package : All
Part No. : All
Defect : Missing

Please enter the Admin's username and Admin's password to continue.

Username : Test

Password :

Ok

Repair Repair Later Ok Variation Ok

Figure 37 Alarm Triggered for Verification according to True Call Setting

p) Pre/ Post

- Repair action in VVTS repair tool will count based on the Pre or Post type settings.
- Drop down list; 'Pre' and 'Post'. Default setting is 'Post'.
- Pre: To save count based on defect name **before** buy off component.
- Post: To save count based on defect name **after** buy off component.

Note: This setting is implemented due to Defect Details dialog in VVTS whereby user is able to select a defect name before buy off.

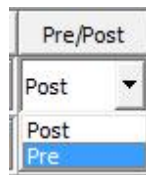


Figure 38 Pre/Post drop down List

Example:

i. Pre

- In VVTS advanced setup window, select Pre/Post as 'Pre'. Set Defect as 'Missing' and select Control as 'On'.
- Click 'Save'.
- Then, close the VVTS advanced setup window and open VVTS repair tool.
- In this case, the alarm will be triggered for count if the component defect name before buy off is 'Missing'.
- Administrator or engineer has to key in the user-name and password in order to continue the buy off process.

Board Type	RefDes	Match Whole Words	Device Type	Package	Part Number	Defect	Chinese	Password	Quantity	Consecutive	Control	Status	Counting	False/True Call	Hour(s)	Pre/Post	Reset Time
All	All	No	All	All	All	Missing	缺少	No	0	No	On	Normal	0	None	-	Pre	2016-11-09-10-01-30

Figure 39 Select Pre

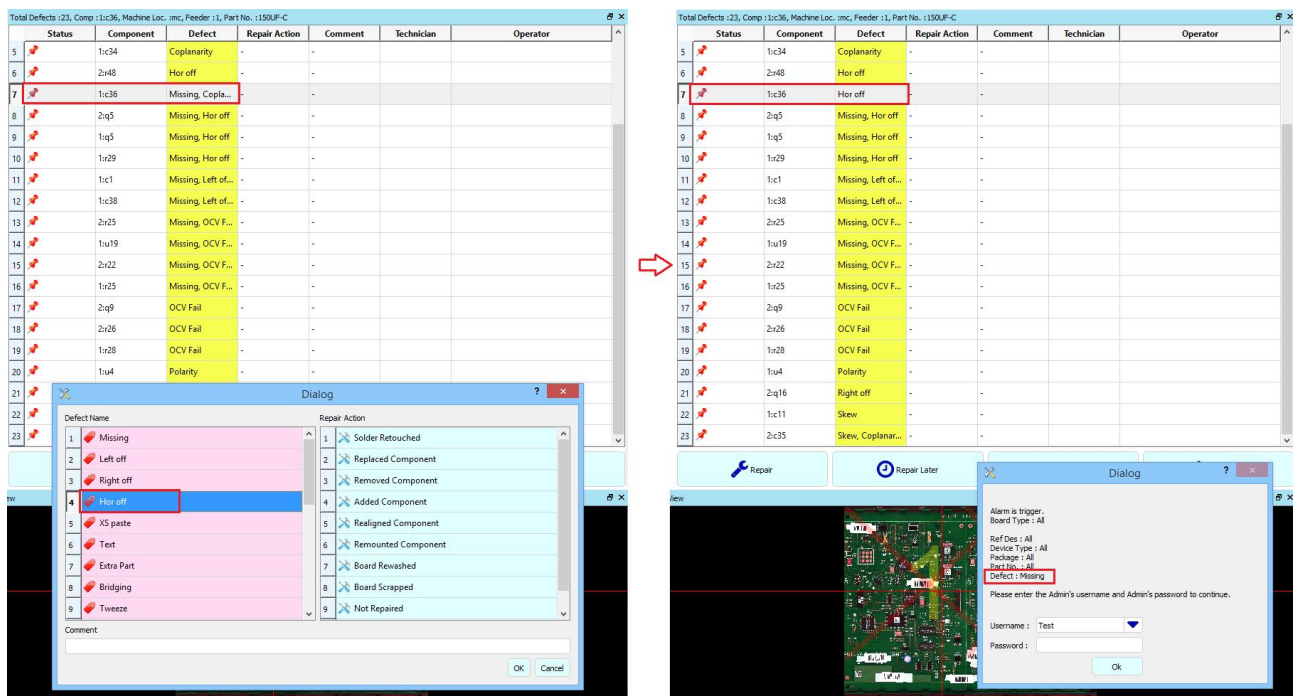


Figure 40 Alarm Triggered for Verification according to Pre Count

ii. Post

- In VVTs advanced setup window, select Pre/Post as 'Post'. Set Defect as 'Missing' and select Control as 'On'.
- Click 'Save'.
- Then, close the VVTs advanced setup window and open VVTs repair tool.
- In this case, the alarm will be triggered for count if the component defect name after buy off is 'Missing'.
- Administrator or engineer has to key in the user-name and password in order to continue the buy off process.

Board Type	Ref Des	Match Whole Words	Device Type	Package	Part Number	Defect	Chinese	Password	Quantity	Consecutive	Control	Status	Counting	False/True Call	Hour(s)	Pre/Post	Reset Time
All	All	No	All	All	All	Missing	缺少	No	0	No	On	Normal	0	None	-	Post	2016-11-09-10-01-30

Figure 41 Select Post

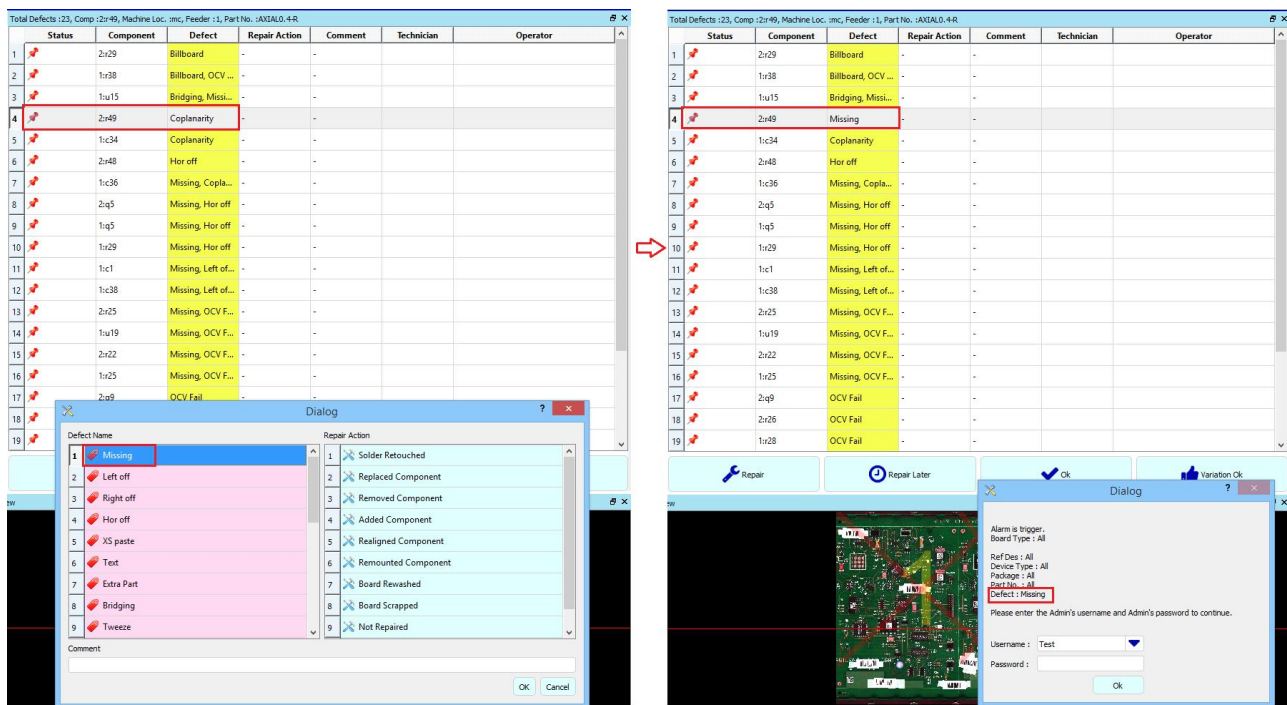


Figure 42 Alarm Triggered for Verification according to Post Count

q) Hour(s)

- To set specific time duration to reset the count automatically.
- Drop down list; '-' and time duration range from minimum '1' to maximum '12'. Default setting is '-'.
- '-': To off time duration for automatic count reset.
- '1' to '12': To set time duration for automatic reset based on selection.



Figure 43 Hour Drop Down List

r) Reset Time

- To display the reset time according to the Hour(s) set.
- The field is not editable. The time display format is 'YYYY-MM-DD-HH-MM-SS'.
- If defects are buy off **within** the Hour(s) set, the time should not be reset and the counting should be continuous according to the quantity set
- If the defects are buy off **after** the Hour(s) set, the time should reset according to the first buy off defect. The counting will reset and restart from zero.

Example:

- In VVTS advanced setup window, select Hour(s) as '2'. Set Defect as 'Missing', set the quantity as '5' and select Control as 'On'.
- Click 'Save'.
- Then, close the VVTS advanced setup window and open VVTS repair tool.
- If defects are buy off within the 2 hours duration set, the counting will be continuous and alarm will be triggered for the 5th failed defect in 'Missing'.
- If defects are buy off after the 2 hours duration set, the time will reset according to the first buy off defect and the counting will restart from zero.

Note: When 'Save' button is clicked; the Reset Time will save the current time.

Board Type	Ref Des	Match Whole Words	Device Type	Package	Part Number	Defect	Chinese	Password	Quantity	Consecutive	Control	Status	Counting	False/True Call	Hour(s)	Pre/Post	Reset Time
All	All	No	All	All	All	Missing	缺少	No	5	No	On	Normal	0	None	2	Post	2016-11-09-15:45-14

Figure 44 Select Hour and Note the Reset Time

s) Other Buttons

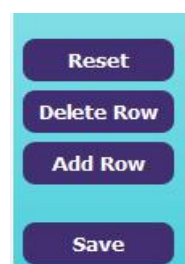


Figure 45 Other Buttons

Button	Feature
Reset	Reset the number of counting, other settings will not be reset. Refer to Figure 48 Note: Counting of ALL rows will be reset.
Delete Row	Remove selected row of settings.
Add Row	Add new row of settings.
Save	Save all of the setting. Note: Save button must be clicked every time changes are made, or else the changes will revert back to the original state.

Table 2 Other Button Feature

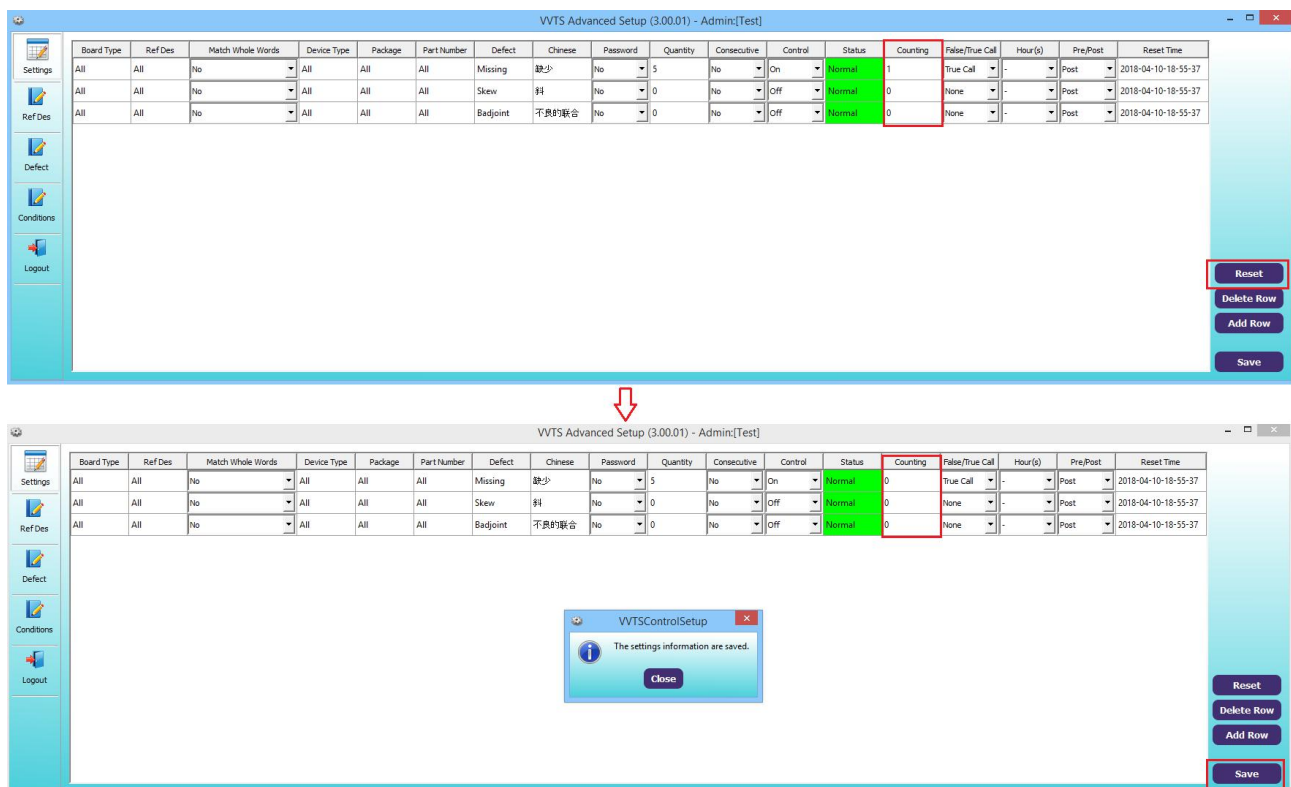


Figure 46 Reset

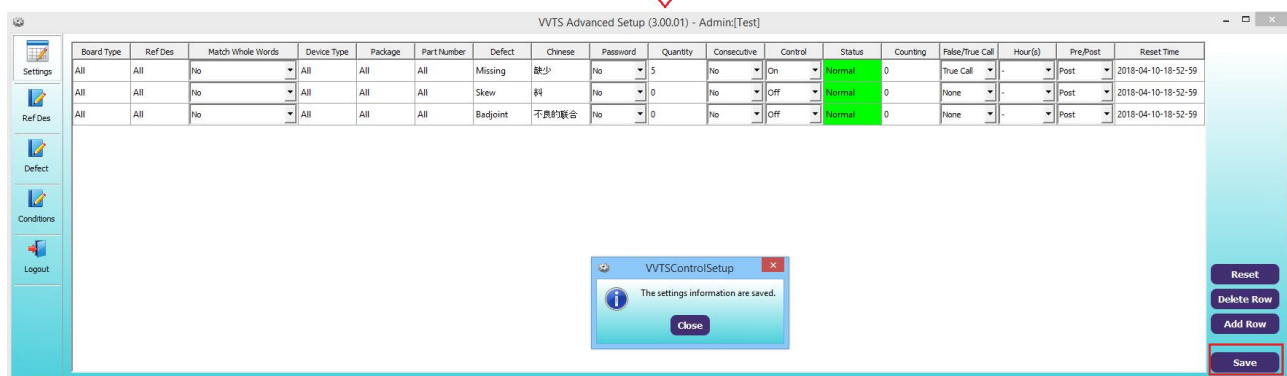
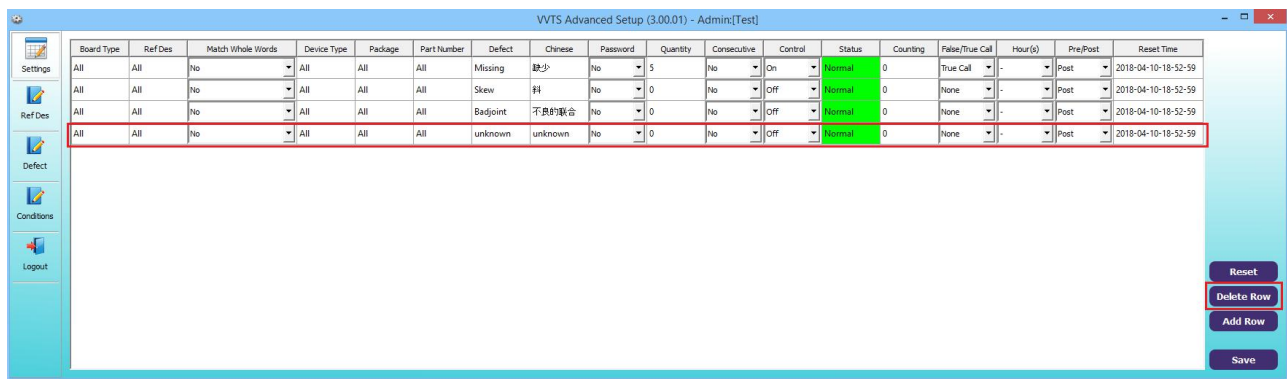


Figure 47 Delete Row

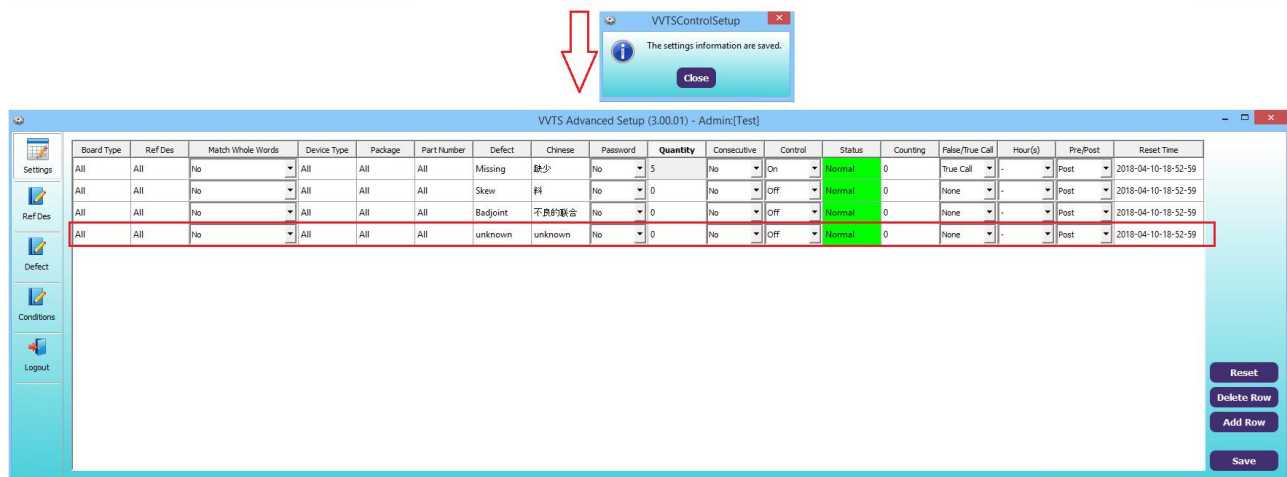
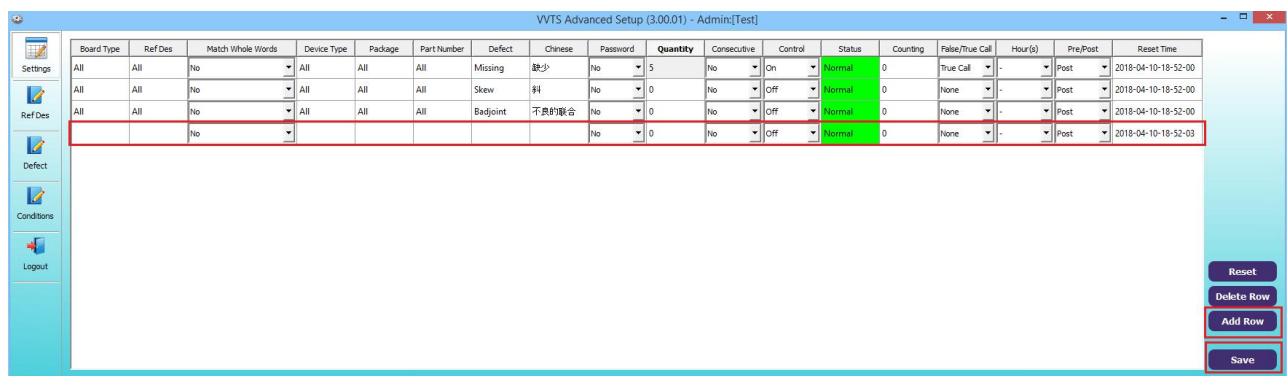


Figure 48 Add Row

Ref Des Page

To control ref des checking.

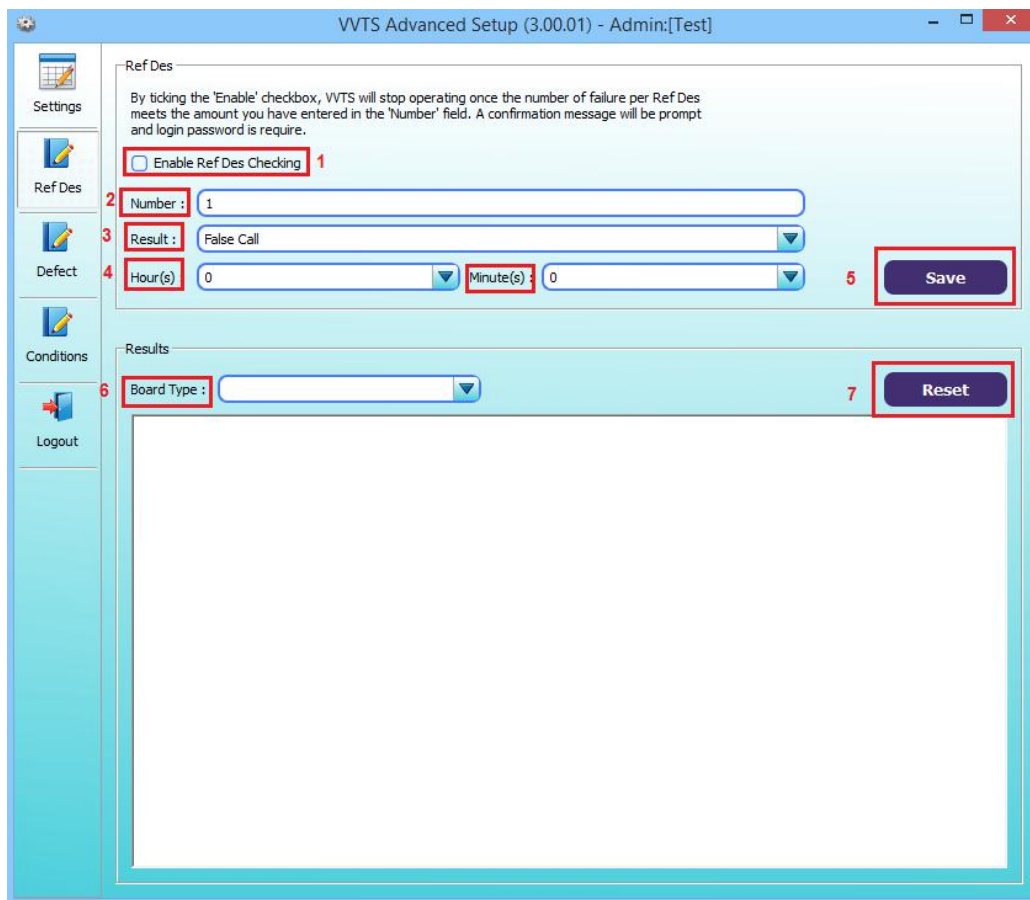

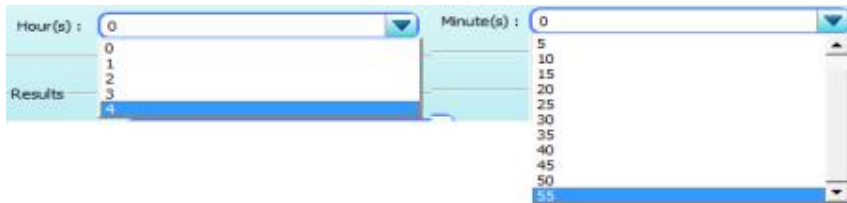
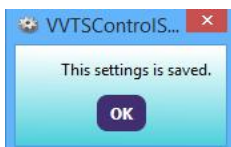


Figure 49 Ref Des Page

No	Feature	Function
1	Enable Ref Des Checking	<ul style="list-style-type: none"> ⊕ Check-box to disable and enable ref des checking ⊕ When enabled, alarm will be triggered and VVTS Repair Tool to stop operating once the number of failure per Ref Des meets the figure that is entered in the 'Number' field.
2	Number	<ul style="list-style-type: none"> ⊕ To set number of failure per Ref Des. ⊕ Text field to enter values up to maximum of 3-digits. <p>Note: The Number field only accepts numbers.</p>

No	Feature	Function
3	Result	<p>✚ To control alarm trigger based on result selected.</p>  <p>Figure 50 Control Alarm Base On Result Drop Down List</p> <p>✚ Drop down list; None, False Call and True Call.</p> <p>✚ None - Alarm will trigger for True Call or False Call count.</p> <p>✚ False Call - Alarm will trigger False Call count only.</p> <p>✚ True Call - Alarm will trigger True Call count only.</p> <p>Note:</p> <ol style="list-style-type: none"> 1. For None, the count will not save buy off defects that have been buy off previously. 2. For True Call and False Call, the count will save buy off defects that have been buy off previously when repair action is changed from True Call to False Call or vice versa.
4	Hour(s) and Minute(s)	<p>✚ To select a time frame to reset the count automatically.</p>  <p>Figure 51 Time Frame To Reset Count Drop Down List</p> <p>✚ Hour(s) and Minute(s) Drop Down List Hour(s) ranges from '0' to '4' with count difference of 1.</p> <p>✚ Minute(s) ranges from '0' to '55' with count difference of 5.</p> <p>Note:</p> <ol style="list-style-type: none"> 1. 0 Hour and 0 Minute will keep number count continuous without any reset time frame. 2. The time frame will check the duration of the board inspection time and compare it to the current time whenever a board is opened.
5	Save	<p>✚ To Save all the settings.</p>  <p>Figure 52 Save Settings</p>

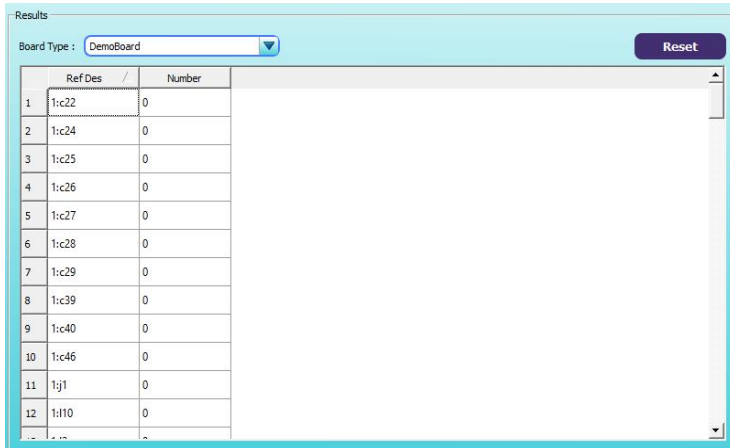

		<p>Note: Save button must be clicked every time changes are made, or else changes will revert back to the original state.</p>
6	Board Type	<p>✚ To select board type from the drop down list to display the ref des results table.</p> <p>✚ The results table will consist of 2 columns namely; Ref Des and Number whereby number column will display the count.</p>  <p style="text-align: center;">Figure 53 Board Results</p> <p>Note: The results are arranged ascending order in default.</p>
7	Reset	<p>✚ To reset the count number of ref des.</p>  <p style="text-align: center;">Figure 54 Reset Prompt</p> <p>Note: Counting of ALL rows will be reset.</p>

Table 3 Ref Des Features

Example:

- In VVTS Advanced Setup Ref Des Page, check Enable Ref Des Checking, set Number as '2', select result as 'None' and set time frame as 1 hour 30 minutes.
- Click 'Save'.
- Then, close the VVTS advanced setup window and open VVTS repair tool.
- In this case, alarm will trigger and VVTS Repair Tool to stop operating once the number of failure per Ref Des meets count two. If defects are buy off after the 1 hour 30 minutes time frame set, the counting will reset and restart from zero.
- Administrator or engineer has to key in the user-name and password in order to continue the buy off process.

Note: The ref des row in results will be removed once alarm is triggered.

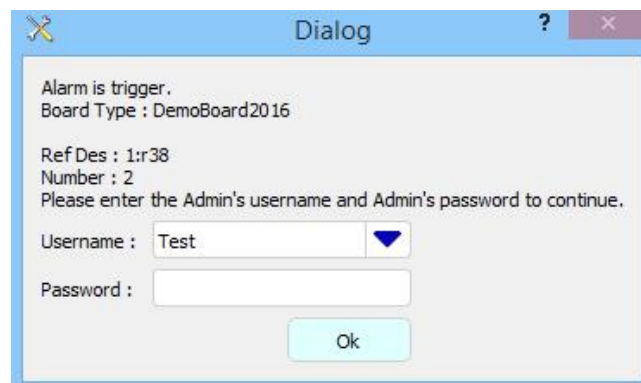
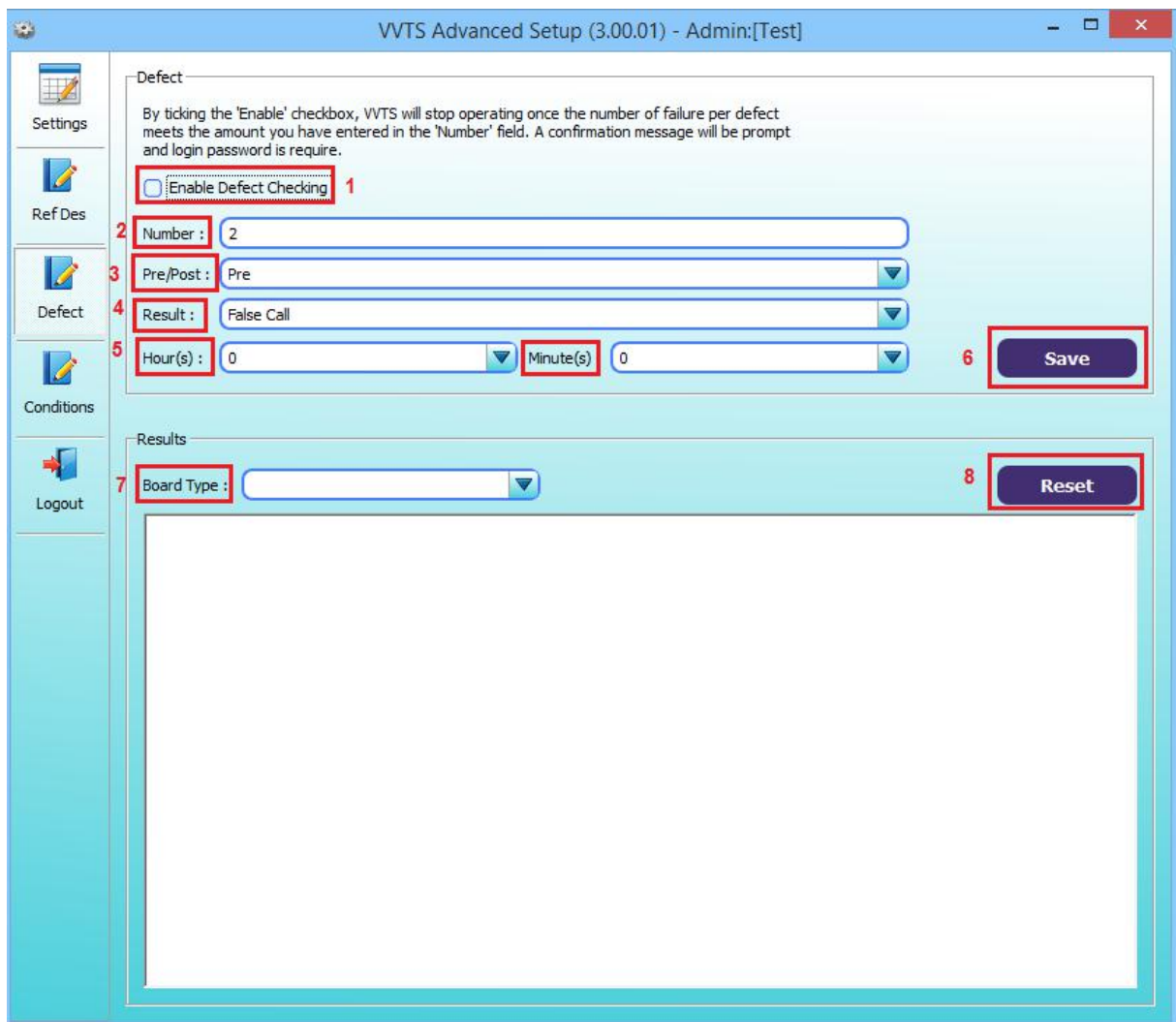


Figure 55 Alarm Triggered for Ref Des Checking

Defect Page

To control defect checking.



VVTS Advanced Setup (3.00.01) - Admin:[Test]

Defect

By ticking the 'Enable' checkbox, VVTS will stop operating once the number of failure per defect meets the amount you have entered in the 'Number' field. A confirmation message will be prompt and login password is require.

☐ Enable Defect Checking 1

2 Number : 2

3 Pre/Post : Pre


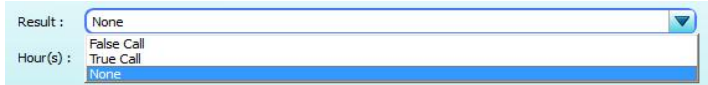
4 Result : False Call

5 Hour(s) : 0 Minute(s) : 0 6 Save

Results

7 Board Type : Reset 8

Figure 56 Defect Page

No	Feature	Function
1	Enable Defect Checking	<ul style="list-style-type: none"> ✚ Check box to disable and enable defect checking ✚ When enabled, alarm will be triggered and VVTS Repair Tool to stop operating once the number of failure per Defect meets the figure that is entered in the 'Number' field.
2	Number	<ul style="list-style-type: none"> ✚ To set number of failure per Defect. ✚ Text field to enter values up to maximum of 3-digits. <p>Note: The Number field only accepts numbers.</p>
3	Pre/ Post	<ul style="list-style-type: none"> ✚ To control count based on the Pre and Post type settings.  <p>Figure 57 Pre/Post Drop Down List</p> <ul style="list-style-type: none"> ✚ Drop down list; 'Pre' and 'Post'. ✚ Pre – To save count number based on defect name before buy off component. ✚ Post – To save count number based on defect name after buy off component.
4	Result	<ul style="list-style-type: none"> ✚ To control alarm trigger based on result selected.  <p>Figure 58 Result Drop Down List</p> <ul style="list-style-type: none"> ✚ Drop down list; None, False Call and True Call. ✚ None – Alarm will trigger for True Call or False Call count. ✚ False Call – Alarm will trigger False Call count only. ✚ True Call – Alarm will trigger True Call count only. <p>Note:</p> <ol style="list-style-type: none"> For None, the count will not save buy off defects that have been buy off previously. For True Call and False Call, the count will save buy off defects that have been buy off previously when repair action is changed from True Call to False Call or vice versa.


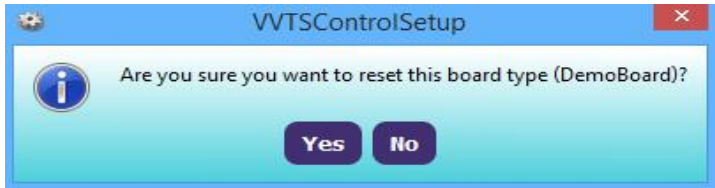
8	Reset	<p>Note: The results are arranged ascending order in default.</p> <p> To reset the count number of defect.</p>  <p>Figure 62 Reset Prompt</p> <p>Note: Counting of ALL rows will be reset.</p>
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Table 4 Defect Features

Example:

- In VVTS Advanced Setup Defect Page, check Enable Defect Checking, set Number as '2', select result as 'None', select 'Post' and set time frame as 1 hour 30 minutes.
- Click 'Save'.
- Then, close the VVTS advanced setup window and open VVTS repair tool.
- In this case, alarm will trigger and VVTS Repair Tool to stop operating once the number of failure per Defect meets count two. If defects are buy off after the 1 hour 30 minutes time frame set, the counting will reset and restart from zero.
- Administrator or engineer has to key in the user-name and password in order to continue the buy off process.

Note: The defect row in results will be removed once alarm is triggered.

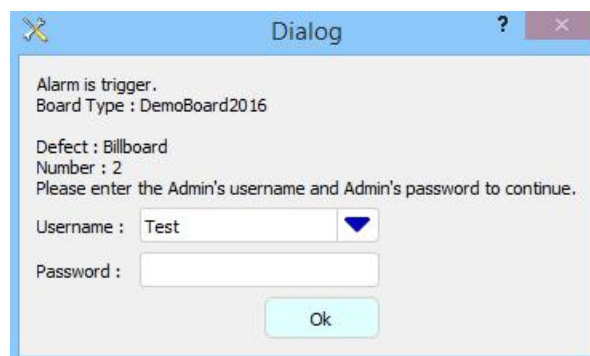


Figure 63 Alarm Triggered for Defect Checking

Conditions Page

To stop VVTS Repair Tool operation for verification based on the VVTS screen lock conditions.

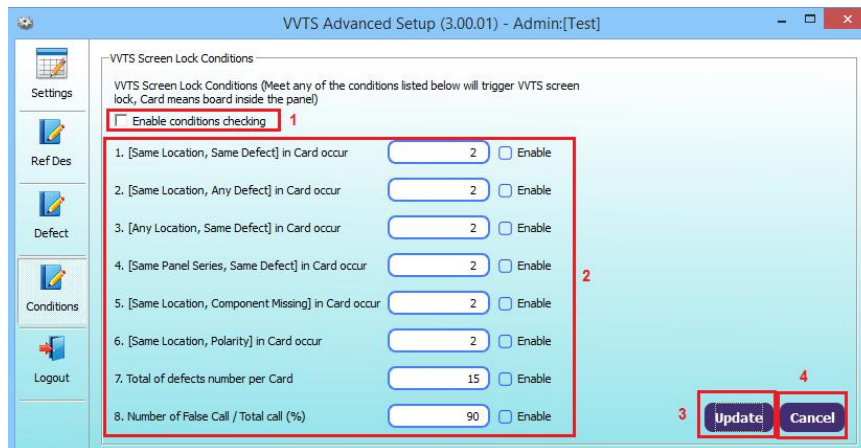


Figure 64 Conditions Page

No	Feature	Function
1	Enable Conditions Checking	<ul style="list-style-type: none"> ✚ Check box to disable and enable conditions checking. ✚ When enabled, alarm will be triggered and VVTS Repair Tool to stop operating once meets the number of occurrence of enabled conditions.
2	Conditions	<ul style="list-style-type: none"> ✚ To select which screen lock conditions checking to enable. ✚ Text field to enter values up to maximum of 3-digits. <p>Note:</p> <ol style="list-style-type: none"> Only Administrator and engineer have the permission to key in the user name and password. Minimum number is 1. The count will save only when board is finish buy off based on the last repair action.
3	Update	<ul style="list-style-type: none"> ✚ To save the all the condition settings and changes made. <p>Note: Update button must be clicked every time changes are made, or else changes will revert back to the original state.</p>
4	Cancel	<ul style="list-style-type: none"> ✚ To initialize all the condition settings back to previous saved settings.

Table 5 Conditions Features

a) [Same Location, Same Defect] in Card occur

Alarm is triggered according to the number set for same defects at the same location (ref des).

1. [Same Location, Same Defect] in Card occur ☒ Enable

Figure 65 Same Location, Same Defect setting

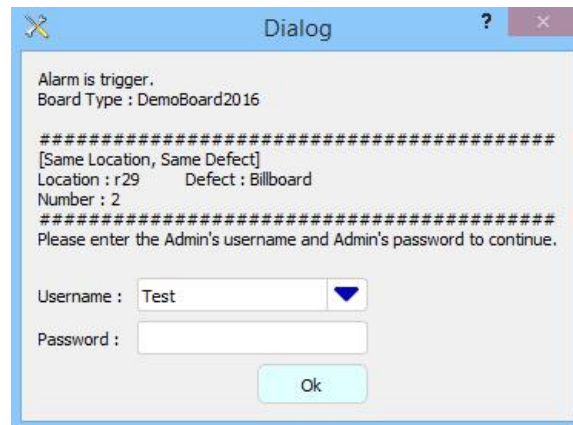


Figure 66 Alarm trigger for Same Location, Same Defect

b) [Same Location, Any Defect] in Card occur

Alarm should be triggered according to the number set for any defects at the same location (ref des).

2. [Same Location, Any Defect] in Card occur ☒ Enable

Figure 67 Same Location, Any Defect setting

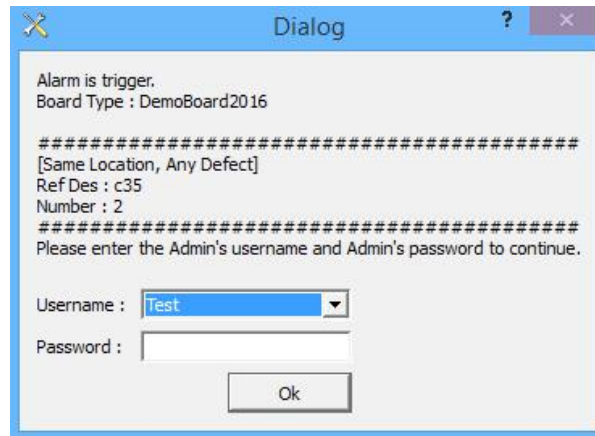


Figure 68 Alarm trigger for Same Location, Any Defect setting

c) **[Any Location, Same Defect] in Card occur**

Alarm should be triggered according to the number set for same defects at the any location (ref des).

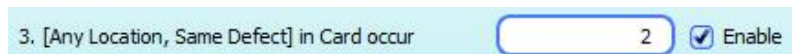


Figure 69 Any Location, Same Defect

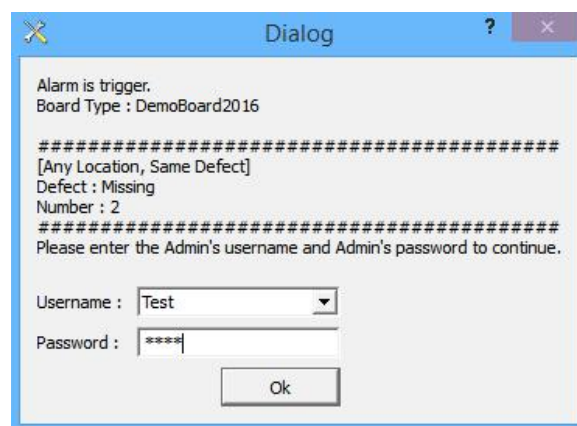


Figure 70 Alarm trigger for Any Location, Same Defect

d) [Same Panel Series, Same Defect] in Card occur

Alarm should be triggered according to the number set for same defects at the same panel series (barcode).

4. [Same Panel Series, Same Defect] in Card occur ☒ Enable

Figure 71 Same Panel Series, Same Defect setting

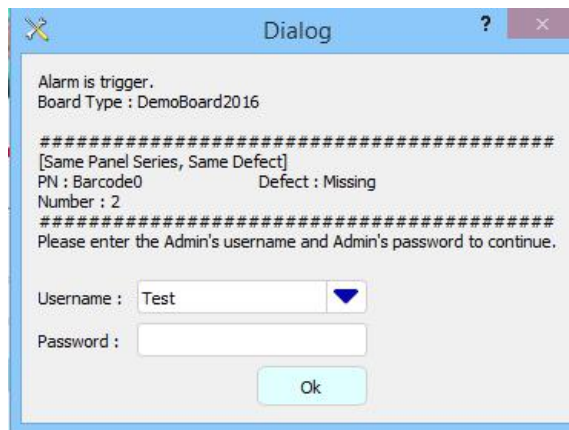


Figure 72 Alarm trigger for Same Panel Series, Same Defect

e) [Same Location, Component Missing] in Card occur

Alarm should be triggered according to the number set for missing defects at the same location (ref des).

5. [Same Location, Component Missing] in Card occur ☒ Enable

Figure 73 Same Location, Component Missing setting

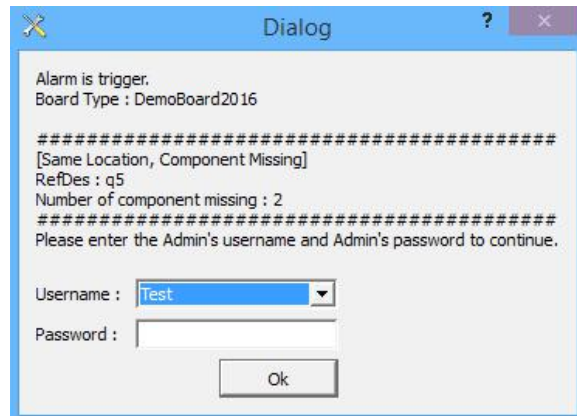


Figure 74 Alarm trigger for Same Location, Component Missing

f) **[Same Location, Polarity] in Card occur**

Alarm should be triggered according to the number set for polarity defects at the same location (ref des).



Figure 75 Same Location, Polarity setting

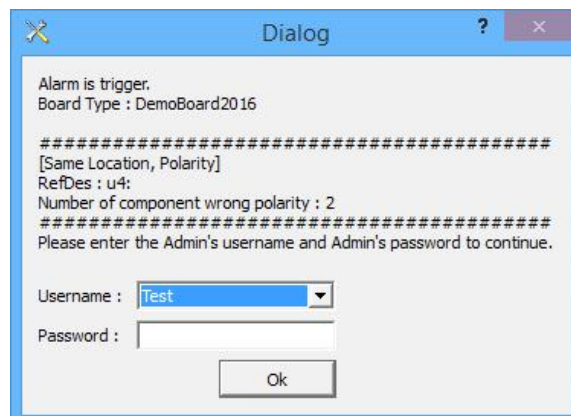


Figure 76 Alarm trigger for Same Location, Polarity

g) Total of defects number per Card

Alarm should be triggered according to the total defects number per card (board).



Figure 77 Total defects number setting

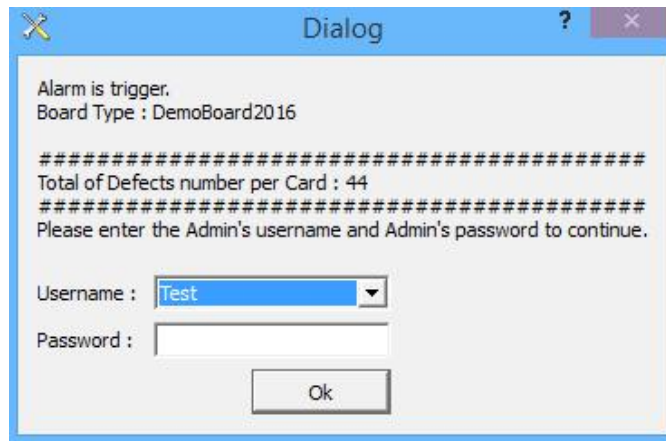


Figure 78 Alarm trigger for total defects number

h) Number of False Call/ Total call (%)

Alarm should be triggered according to percentage of number of false call over total defects.



Figure 79 Percentage of False call over Total call setting

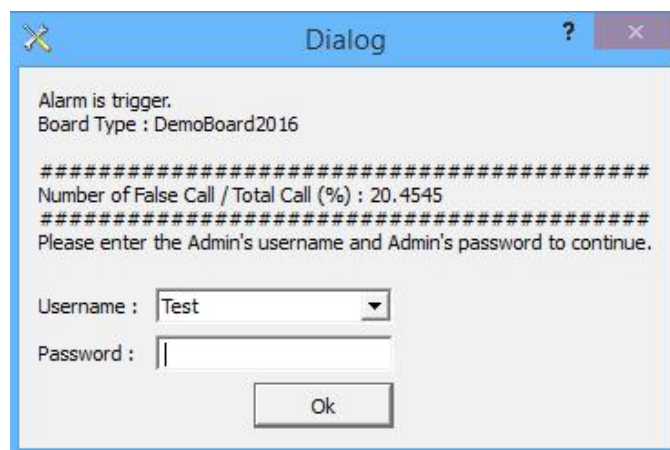


Figure 80 Alarm trigger for percentage of False call over Total call

Additional Notes:

1. When all the settings (Password, Control, Ref Des checking and Defect checking) in VVTS Advanced Setup is enable together, the order of prompt display is as Figure 69.

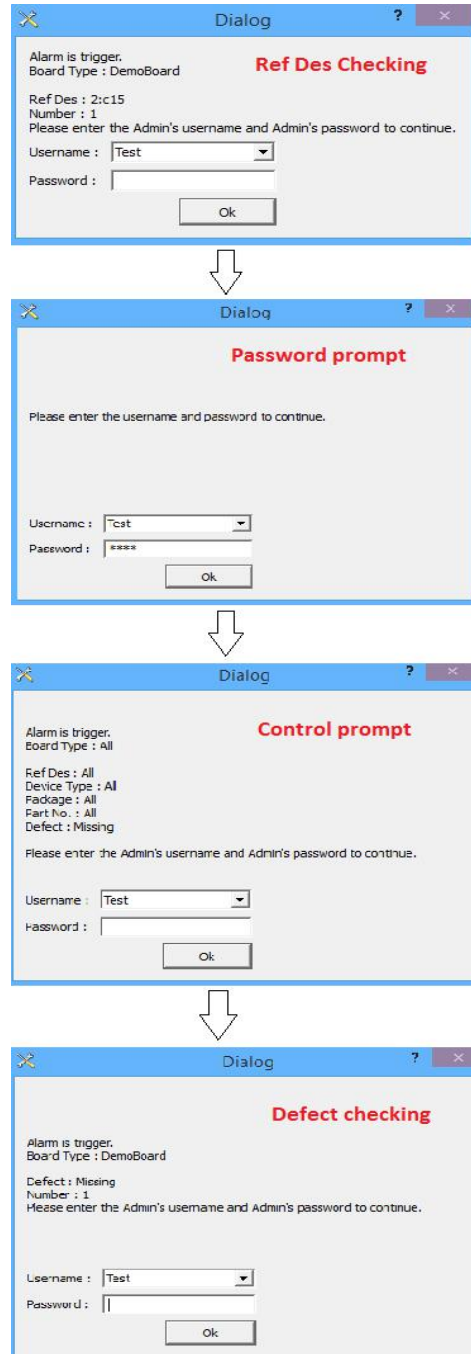


Figure 81 Prompt Order

2. If more than one alarm is triggered for verification, the latest username key in is saved at the technician field column.
3. All the settings are only applicable for component level defects.
4. When all conditions are enabled, the prompt order are divided into several level which are
 - a) First - Total of defect number per Card
 - b) Second - Same Panel Series, Same Defect
 - c) Third - Same Location, Component Missing/ Same Location, Polarity
 - d) Fourth - Same Location, Same Defect/ Same Location, Any Defect/ Any Location, Same Defect
 - e) Excluded - Number of False Call/ Total Call (%) as this checking is by False Call.
5. Whenever Same Location, Same Defect is enabled together with Same Location, Component Missing or Same Location, Polarity the checking of defect Missing or Polarity will be excluded in Same Location, Same Defect Checking.