

ATS inspect[®] Visual Quality

What's New in 5.4.1



Table of Contents

New Features in ATS Inspect 5.4.1	5
1. Custom Unit Information.....	5
Unit Lists	5
Custom Info Field	5
Reporting Filter.....	6
2. Import and Export Forms.....	6
New Features in ATS Inspect 5.4	7
1. Mandatory Inspection Sequence	7
2. Checklist control.....	8
3. Reference documents	9
4. Replaceable Parameters.....	11
5. Loading Layouts.....	11
6. New Repair Controls	11
7. Clone Station	11
8. Serial Port Handlers	11
9. Repair Triggers	11
10. SQL Server login	11
11. Travel Service	12
12. XML Comm Service.....	12
13. Password Encryption	12
New Features in ATS Inspect 5.3	13
1. Cockpit (New Application)	13
2. Data Archiver (New Application)	13
3. Form Composer (New Application).....	14
4. Variable Data Collect (New Application)	15
5. Keyboard entry to find part in checklist	16
6. Part/Concern extended properties	16
7. Selected Parts and Views in categories.....	16
8. Defect selection radius	16
9. Optional detail selection	17
10. Turn on/off validation sounds	17
11. Question can appear in more than one category in a checklist.....	18
12. Question can be included in a Product Group	18
13. Load views on demand.....	18
14. Resize original size of views	18
15. List of screens shown for selected template.....	19
16. Make non-essential languages inactive	19
17. Instant update of checklist questions	19
18. Auto-select Detail	20
19. Defect Filter Mode button renamed.....	20
20. Transfer layouts between databases	20
21. View layout, template and station relationships.....	21
22. Display and Hide Main View Information.....	21
23. MFR Part Number in Raw Data Dump report.....	22
24. Regenerate and delete questions	22
25. Modified Defect Removal/Correction Filter	22
26. Login rights.....	22

27.	Additional security rights	22
28.	New Services	23
29.	Default Service Ports	23
30.	Startup Switches.....	23
31.	Locked units	24
32.	Supported platforms	24
New Features in ATS Inspect 5.2		25
1.	Windows Authentication	25
2.	Table Auditing	25
3.	Security Manager	26
4.	Improved Licensing	26
5.	Multiple Defect Entry	26
6.	New Copy Unit Control	27
7.	Force Rank	27
8.	Station – Top Concerns.....	28
9.	Dependent SQL Controls	29
10.	Canvas Size on Layout Manager	32
11.	Thumbnail View in Admin	32
12.	New Station Types	33
13.	Reference to New Checklist Validation Service.....	33
New Features in ATS Inspect 5.0		34
14.	Direct Run	34
15.	Defects per Unit.....	34
16.	Station Serial Port Handlers.....	35
17.	Most Common Defects	35
18.	Security Rights	35
19.	Part/Concern/Repair	35
20.	Root Causes.....	35
21.	Default Concern/Repair Relationships	36
22.	Add Code to Checklist Questions	36
23.	Auto Logoff Timeout	36
24.	Dynamic Validation for Numeric Checklist Questions	36
25.	New Pass Option for Stations	37
26.	New Print Option for Checklists	37
27.	Travel Service Ticket Type	37
28.	Checklist Popup Mode.....	37
29.	Mandatory Comments for Defects and Repairs.....	38
30.	Spreadsheet Controls – Add Current Shift option.....	38
31.	User Properties	39
32.	Allow Users to Select Non-default Printer in Data Collect.....	40
33.	Change Defect and Overview screen general changes.....	40
34.	Overview	41
35.	Version Number added to Window Title Bar	42
36.	Warning for possible duplicate defects.....	42
37.	Custom Defect List	43
38.	No Multiple Instances Command-Line Option	43
39.	Scaling Command-Line Option	43
40.	Add Popup Keyboard capability to Text and Number Value Checklist Questions	43
41.	Checklist Layout Changes	44
42.	Templates Filter.....	45

43.	Unit Checklist Removal.....	47
44.	Defect Correction.....	47
45.	Searching	47
46.	Custom Criteria Multiple Selection	48
47.	First Time Quality	48
48.	Checklist Summary.....	48
49.	Single Unit History	50
50.	Monthly-Weekly-Daily Trend.....	51
51.	Concern Spectrum – Package	51
52.	Concern Spectrum.....	52
53.	Control Charts	52
54.	Reload Triggers.....	53
55.	Traffic Service	53
56.	Licensing Service	53
	New Features in ATS Inspect from 4.1	54
1.	New Shift Scheduling Setup in Admin.....	54
2.	Increased Maximum Units Displayed and New Mask Characters for Data Collect	55
3.	Database Schema.....	55
4.	Oracle Support.....	56
5.	Upgrade Scripts Merged.....	56
6.	Name of Application Displayed on Title Bar	56
	New Features in ATS Inspect from 4.0	57
1.	New Checklist functionality for Data Collect.....	57
2.	CAD File Import.....	58
3.	Image Capture for Defects/Repairs.	58
4.	View Enhancements.....	58
5.	Enhanced Reporting Features.....	59
	Program Fixes from 5.4.....	60
	Program Fixes from 5.3.....	61
	Program Fixes from 5.2.....	62
	Program Fixes from 4.1.....	65
	Program Fixes from 4.0.....	68

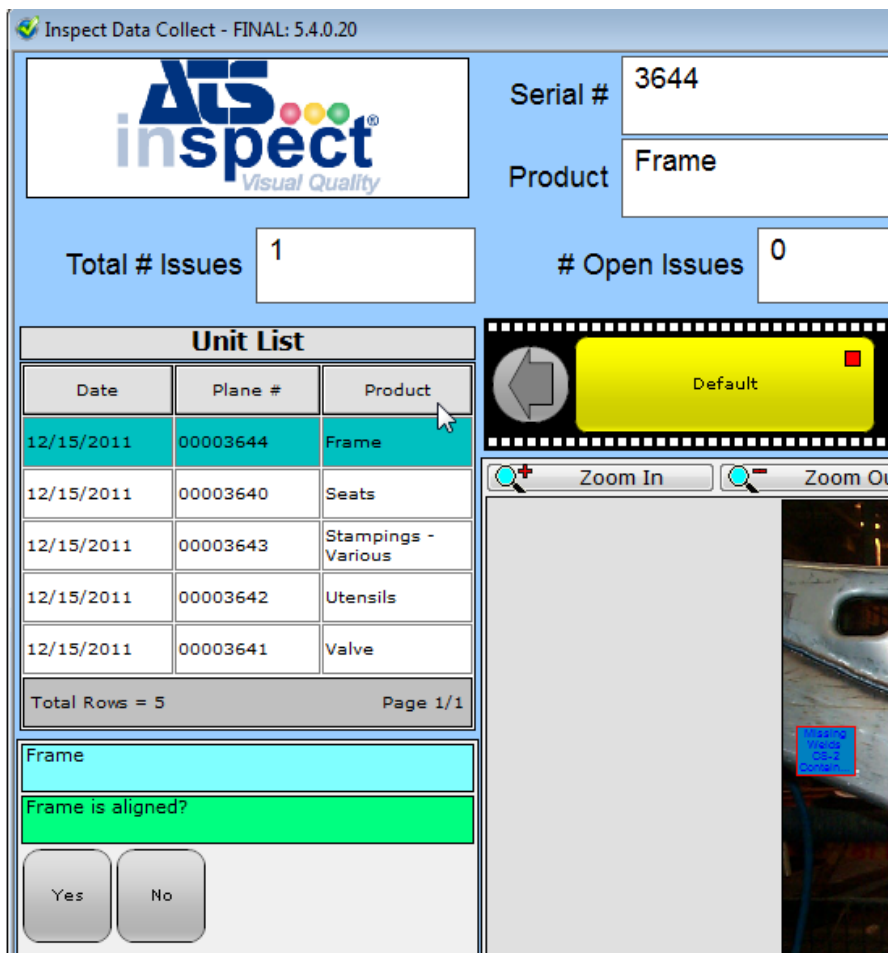
New Features in ATS Inspect 5.4.1

1. Custom Unit Information

Data collection and reporting have now been enhanced by the use of custom unit information. For example, you can add a variable to the units named Inspection Stage which would relate to the current location of the unit within the inspection process. The variable can then be used in the following ways:

Unit Lists

Display custom unit information in the unit lists when using Data Collect and Auditor. The unit lists allow the operator to select a unit to be inspected. The operator can sort the list using the custom field to quickly locate and select the required unit. This modification affects the *Unit List* and *Unit List - Audit* screens, as well as the *Unit List* control in the *Main* and *Main - Audit* screens.



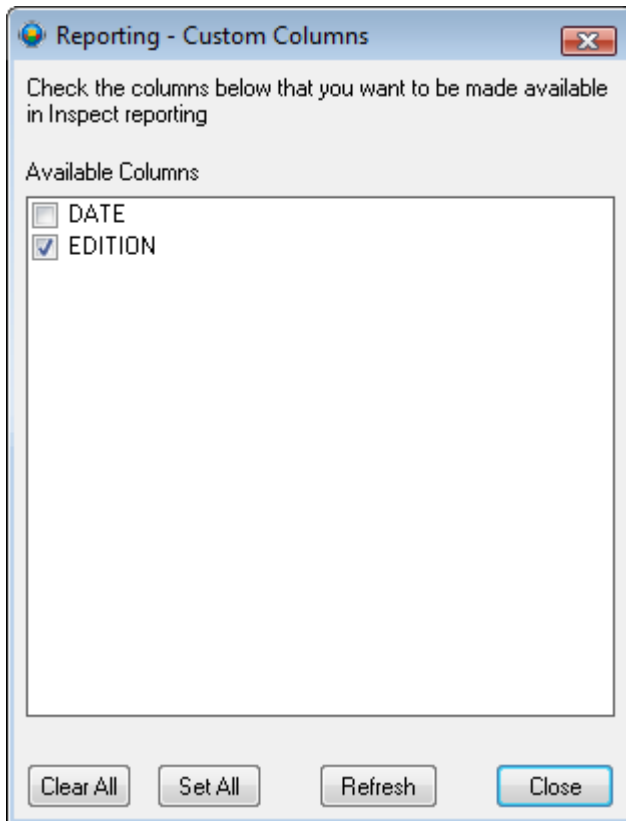
Custom Info Field

This control (available in the *Main* and *Main - Audit* screens) will display custom data related to the unit.



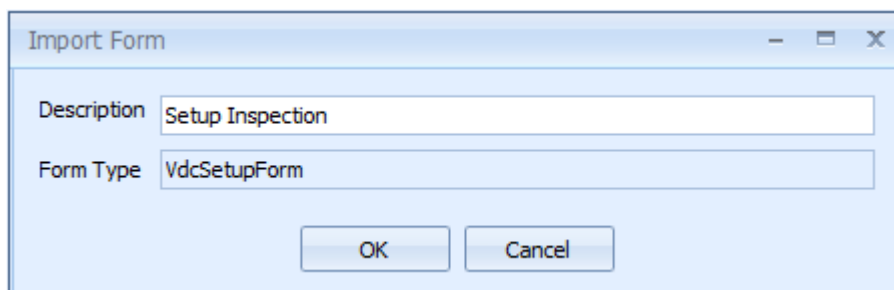
Reporting Filter

Custom unit information can be added as a filter in Reporting.



2. Import and Export Forms

Form Composer forms can now be exported and imported individually as files, allowing them to be copied and transferred between systems.

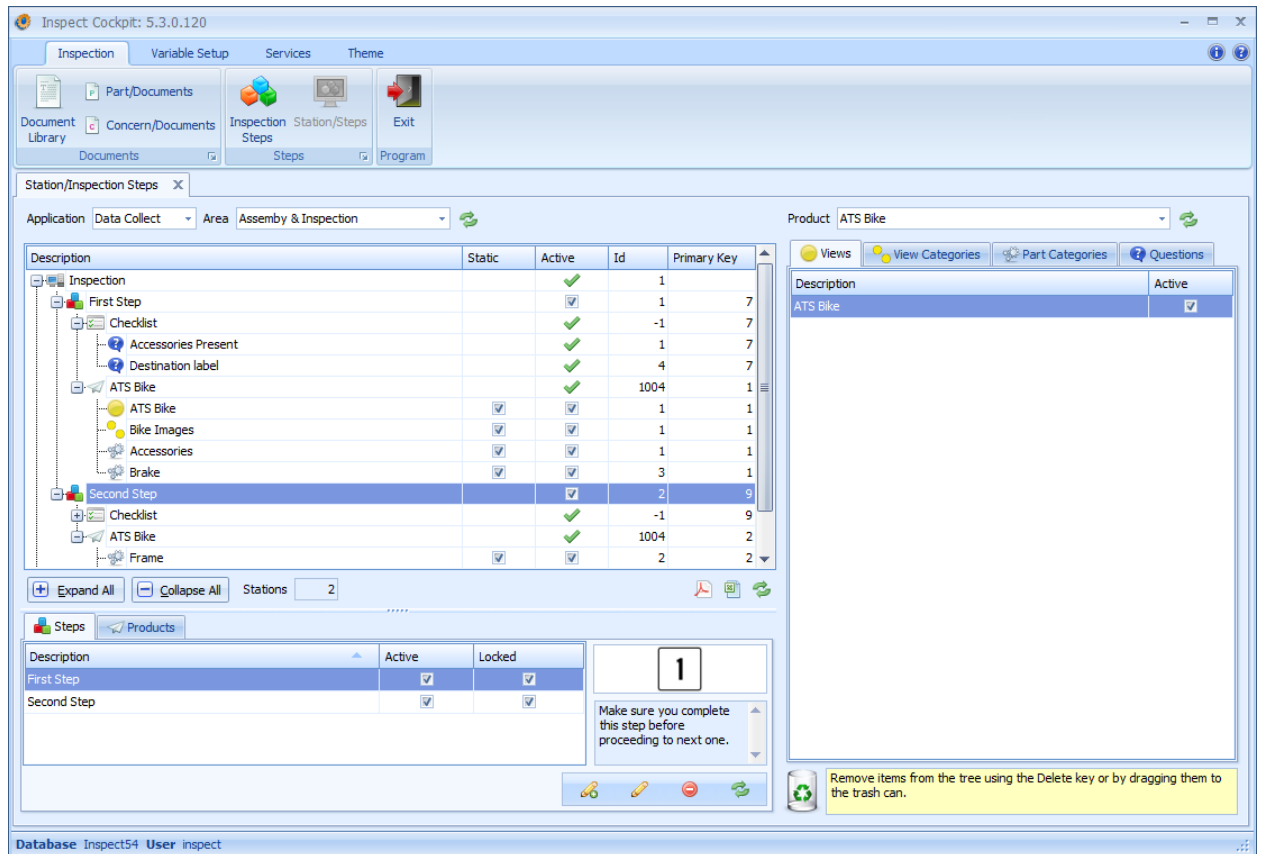


New Features in ATS Inspect 5.4

Data Collect

1. Mandatory Inspection Sequence

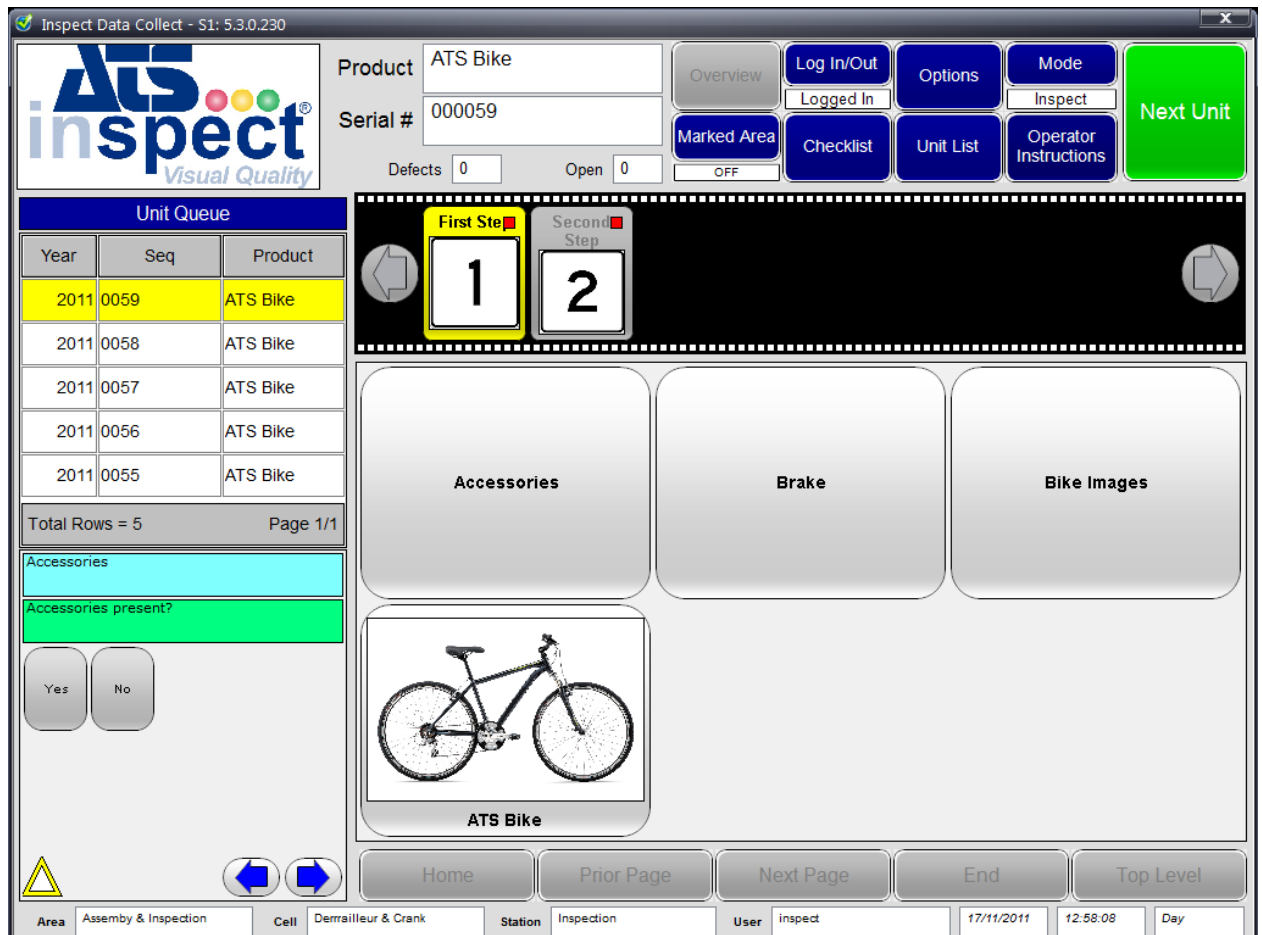
System administrators now have the ability to create inspection steps. Inspection steps are assigned to each station in the desired sequence using Cockpit. Each step may include checklist questions, views, view categories and part categories and can have an image associated to it to highlight where the operator is working.



In Data Collect the operator must begin with the first inspection step assigned to the station, and cannot proceed to the next step until the current step has been completed. Completion will be accomplished by answering all checklist questions assigned to the step.

To help visualize where the user is in the overall inspection process, a new Filmstrip control has been introduced. It allows the user, at a glance, to know exactly where they are. If the Inspection step contains an image, it will be displayed in the control.

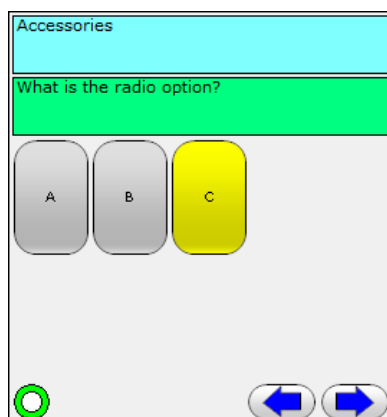
Inspectors may logout at any point during the inspection process and the current inspection step will be saved. Any inspector will be able to login, pull up the same unit and continue the inspection at the point where the previous inspector left off.



In order to simplify the setup procedure Cockpit now contains the functionality to associate the Views, View Categories and Part Categories to a Data Collect station. This functionality was previously in Admin.

2. Checklist control

A new Checklist Control has been introduced in the main screen to make it easier to answer checklist questions,. It is very similar to the control available on the Mobile Checklist application, which has been welcomed by our customers. The control will cycle through the questions tied to an Inspection Step, one question at a time. If the answer is correct, it automatically moves on to the next question. If not, it indicates the wrong answer and requests confirmation.



3. Reference documents

On the Defect and Repair screens, the operator can now view images and documents that describe the acceptable/non-acceptable conditions on the selected part. These could be documents such as operator instructions, process sheets, drawings or visual aids. They can be associated to the following items:

- Part
- Part + Concern
- Part + Concern + Repair

The files that can be displayed are limited only by the available viewers installed on the client machine. For example, if Adobe Reader is installed, PDF files can be opened.

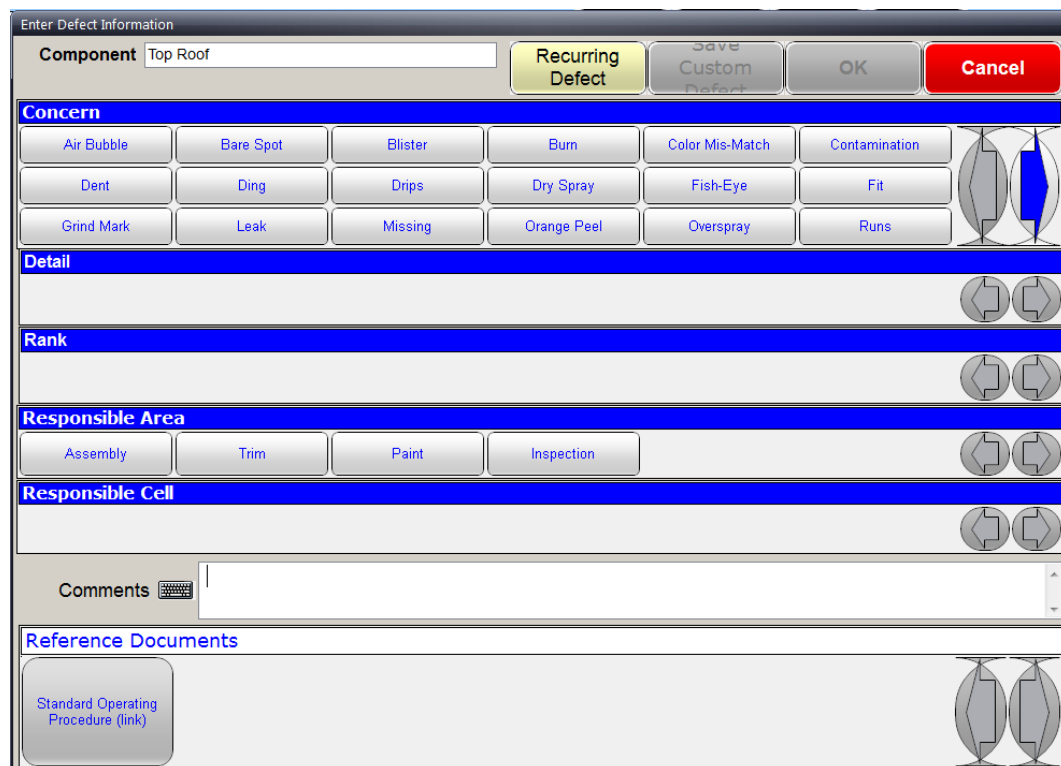


Figure 1 – Reference Documents Associated to Part

Figure 2 – Reference Documents Associated to Part + Concern

Repair Type	# of Repairs	% of Total	Comment	Date
Total Rows = 0				

Figure 3 – Reference Documents Associated to Part + Concern + Repair

4. Replaceable Parameters

New replaceable parameters have been created:

- current_part_id
- current_part_code
- current_concern_id
- current_concern_code
- current_repair_type_id
- current_repair_type_code

5. Loading Layouts

All layouts are now loaded on demand which means that the initial startup time of the program is much faster.

6. New Repair Controls

Two new controls have been added to the *Repair* screen to speed up the repair process. The *Last Repair Comments* control displays a list of most recent comments associated to the selected Component/Concern/Repair combination. The *Top Repair Types* control displays the most common repairs for the selected component.

Admin

7. Clone Station

Station cloning now copies across all station settings automatically.

8. Serial Port Handlers

The Serial Port Handler functionality has now been moved to Cockpit.

Event Service

9. Repair Triggers

It is now possible to create Repair Triggers. A Repair Trigger is very similar to a Defect Trigger. Repair Triggers send notifications when individual repairs are entered into the Inspect system. Administrators can customize these triggers so that notifications will be sent when a specific type of repair is carried out on a specific component used in one product. Repair triggers can also be set up to send notifications when any repair is carried out on any component used in any product assembled in the plant.

Security Manager

10. SQL Server login

It is no longer possible to modify the password of an SQL Server login using Security Manager. The modification must now be carried out in SQL Server Management Studio.

Services

11. Travel Service

Travel Service has been rewritten in .NET and the image caching function has been made optional.

12. XML Comm Service

The XML Comm Service has been removed.

Database

13. Password Encryption

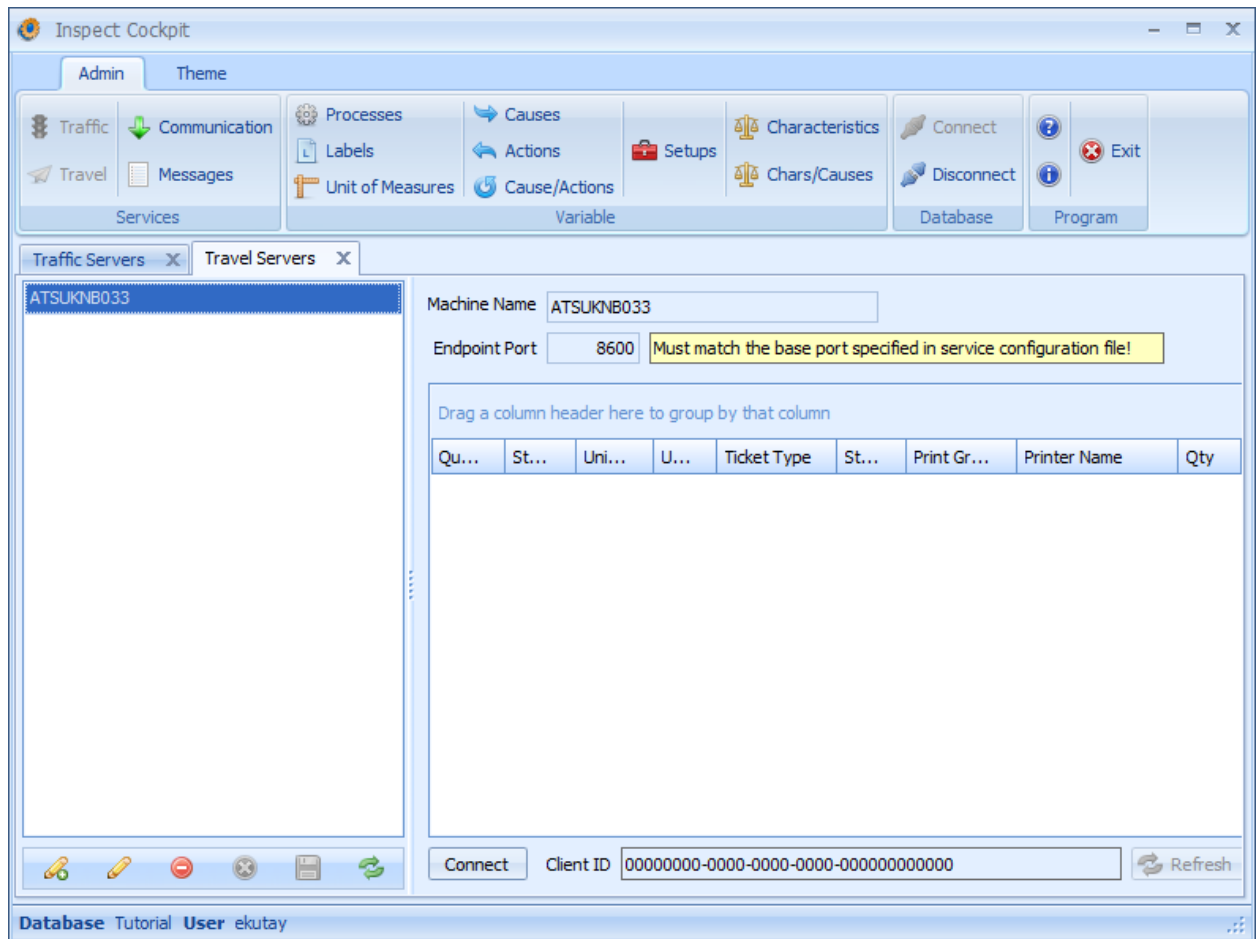
ATS Inspect now encrypts its passwords in the database. This provides you with a much higher level of security.

New Features in ATS Inspect 5.3

1. Cockpit (New Application)

System administrators and other IT/technical resources use this application to configure, manage and monitor communication processes and services for external systems that send information to and from Inspect. It manages the configuration of the new .NET version of Inspect Communication Services.

It also manages the configuration of the information required for Variable Data Collection.

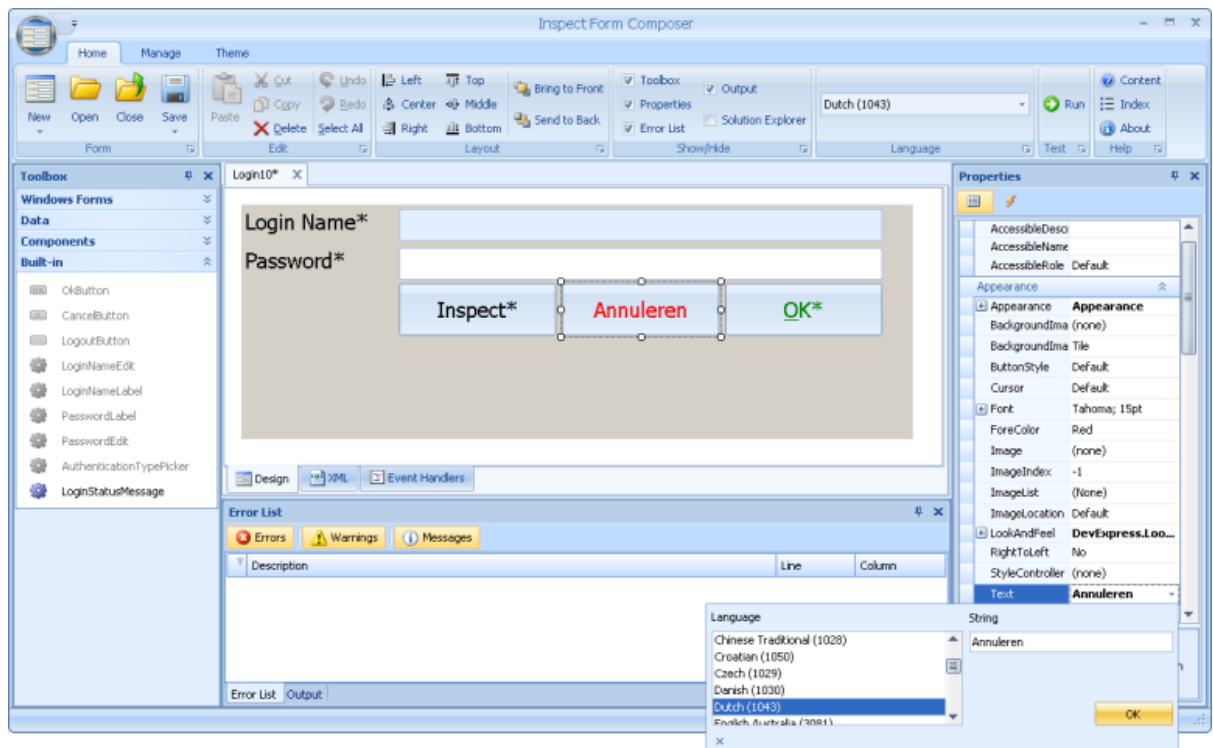


2. Data Archiver (New Application)

This new data management tool allows you to remove your historical data from the Inspect database and store it on a separate file. This will free up online resources and increase the analytical speed of your production systems by reducing the amount of data in the system.

3. Form Composer (New Application)

The Form Composer application is a design and layout program for customizing the appearance of screens used at the Inspect Variable Data Collect stations. The system administrator can create templates, comprised of forms, to control the colors, sizes, fonts and placements of every Variable Data Collect screen.



4. Variable Data Collect (New Application)

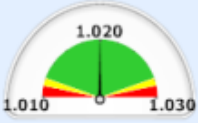
Inspect has long been the preferred data analysis tool for Six Sigma Black Belts in the attribute data world; we have now crossed the threshold into the variable data world.

Variable Data Collect allows operators to record Critical To Quality characteristics such as lengths, diameters, temperatures, voltage or weight. Statistical process control charts are also now available for real-time data analysis. Our customers asked to have all data, attribute and variable, in one portal; and we listened.

Input
⌵ ⌵ ⌵

Width

 Centimeter (cm)




Entering measurement

	Length	Width	Weight
1	5.020	1.020	
2	5.030	1.029	
3	5.010		

Notes

Possible error in gauge measurement.

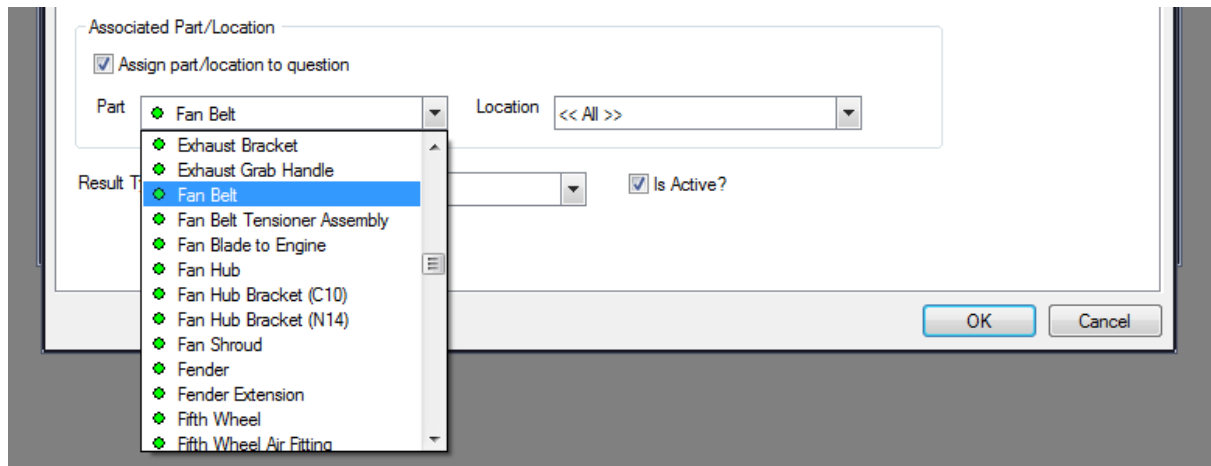


Close
Save
Product Spec PDF

Admin

5. Keyboard entry to find part in checklist

When creating or editing a question, the associated part/location can be found faster by selecting the dropdown list and pressing the first letter of the part/location you are looking for. The list will then jump to part/locations starting with that letter.



6. Part/Concern extended properties

The matching options for a part/concern repair relationship can include a dynamic lookup and location.

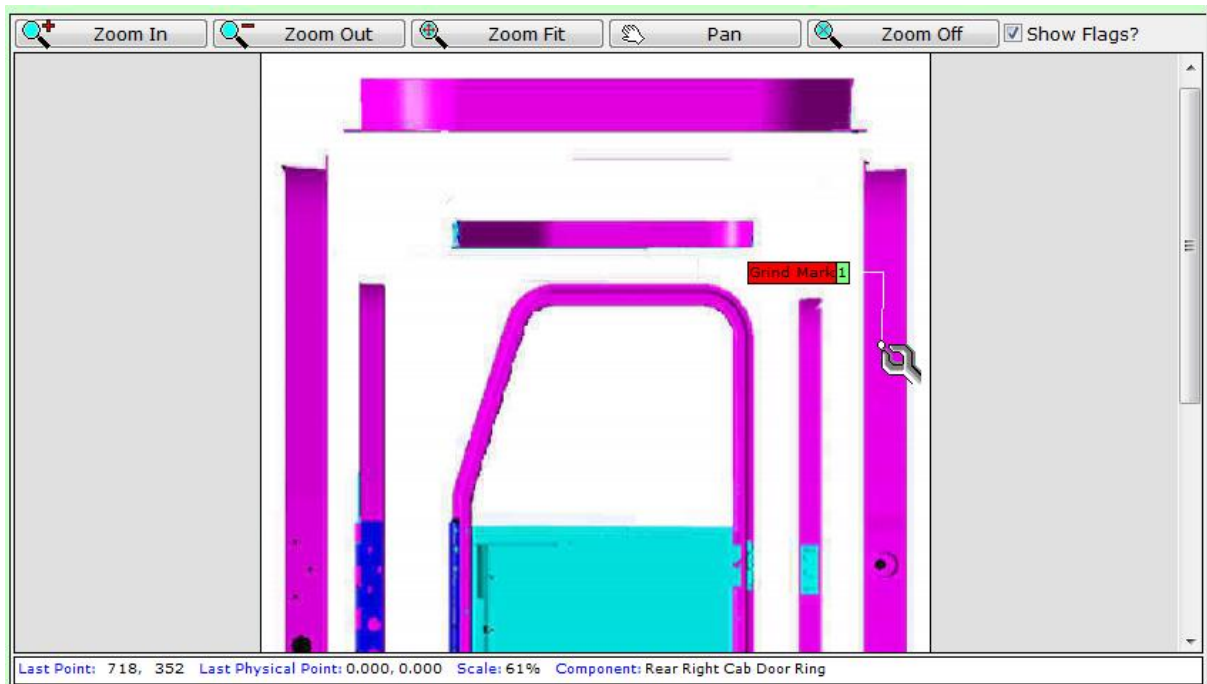
7. Selected Parts and Views in categories

When looking at the View Categories popup, highlighted views remain selected when you switch between products. This saves the user from having to find and re-select views when the same views are required in several products. The same also happens in the Part Categories popup.

8. Defect selection radius

The radius at which a defect can be selected in Data Collect and Auditor can be modified in the station options. Enlarging the radius at which a defect can be selected will make them easier to select.

On the other hand the radius can be reduced if the defects are generally close together.



9. Optional detail selection

Detail entry in Data Collect and Auditor can be made either optional or mandatory in the station options. When detail entry is mandatory, and there are details available for the selected concern, the OK button won't be activated until a detail has been selected.

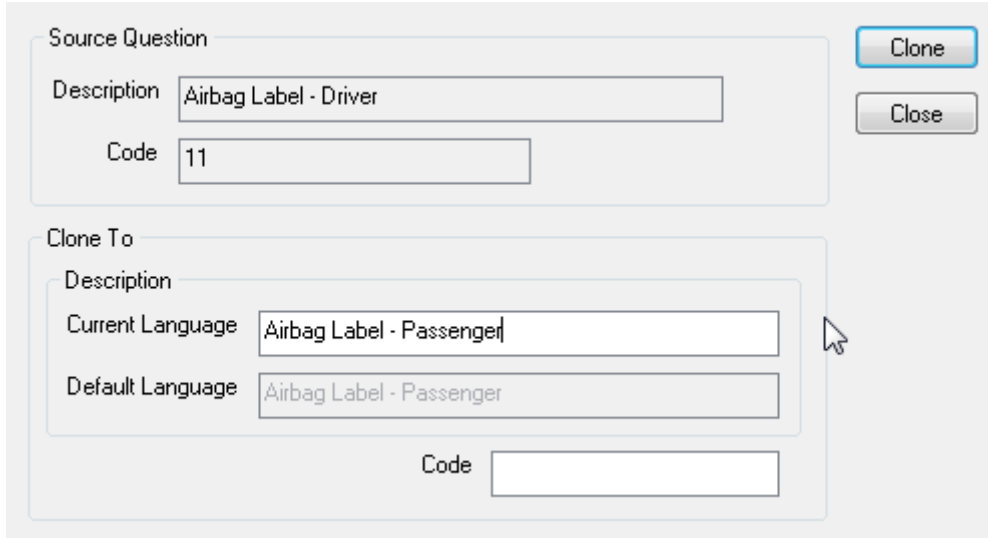
Component	Front Right Cab Door Ring	Recurring Defect	Save Custom Defect	OK	Cancel
Concern					
Bad Metal	Bleed Thru	Bulls Eye	Contamination	Ding	Dirt
Fibers	Fish Eyes/Craters	Flat Dry	Gouge	Grind Mark	Hole
Detail					
< .5"	< 1.0"	< 2.0"	> 2.0"		
Rank					
Complete Repaint	Touch-Up Booth	Touch-Up	Information Only	AAA - Page Tom	
Responsible Area					
Dept. 14	Axle Line	Cab Trim 0	Axle Mount	Engine Trim	Engineering
Responsible Cell					
A/C Line	Cab Drop	Tire Mount	Slat Line	Hood Line	
Comments <input type="text"/>					
Tracking Number <input type="text"/>					

10. Turn on/off validation sounds

Validation sounds for checklist questions in Data Collect and Auditor can be turned on or off in the station options.

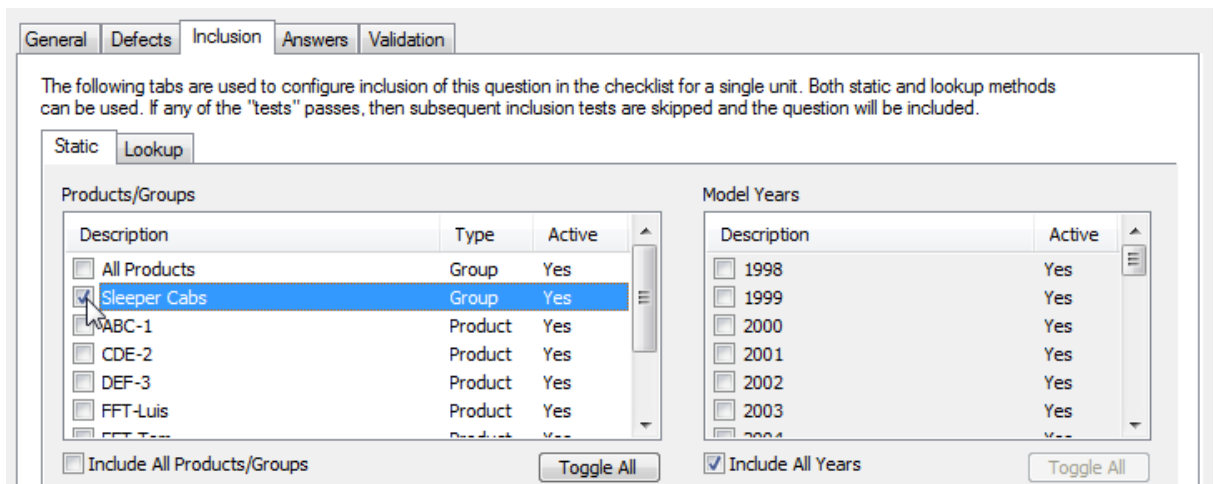
11. Question can appear in more than one category in a checklist

A question can be cloned and modified so that it appears in more than one category of the same checklist.



12. Question can be included in a Product Group

The inclusion tab in question properties allows a question to be included in an entire product group as well as in individual products.



Description	Type	Active
<input type="checkbox"/> All Products	Group	Yes
<input checked="" type="checkbox"/> Sleeper Cabs	Group	Yes
<input type="checkbox"/> ABC-1	Product	Yes
<input type="checkbox"/> CDE-2	Product	Yes
<input type="checkbox"/> DEF-3	Product	Yes
<input type="checkbox"/> FFT-Luis	Product	Yes
<input type="checkbox"/> FFT-Test	Product	Yes

Description	Active
<input type="checkbox"/> 1998	Yes
<input type="checkbox"/> 1999	Yes
<input type="checkbox"/> 2000	Yes
<input type="checkbox"/> 2001	Yes
<input type="checkbox"/> 2002	Yes
<input type="checkbox"/> 2003	Yes
<input type="checkbox"/> 2004	Yes

13. Load views on demand

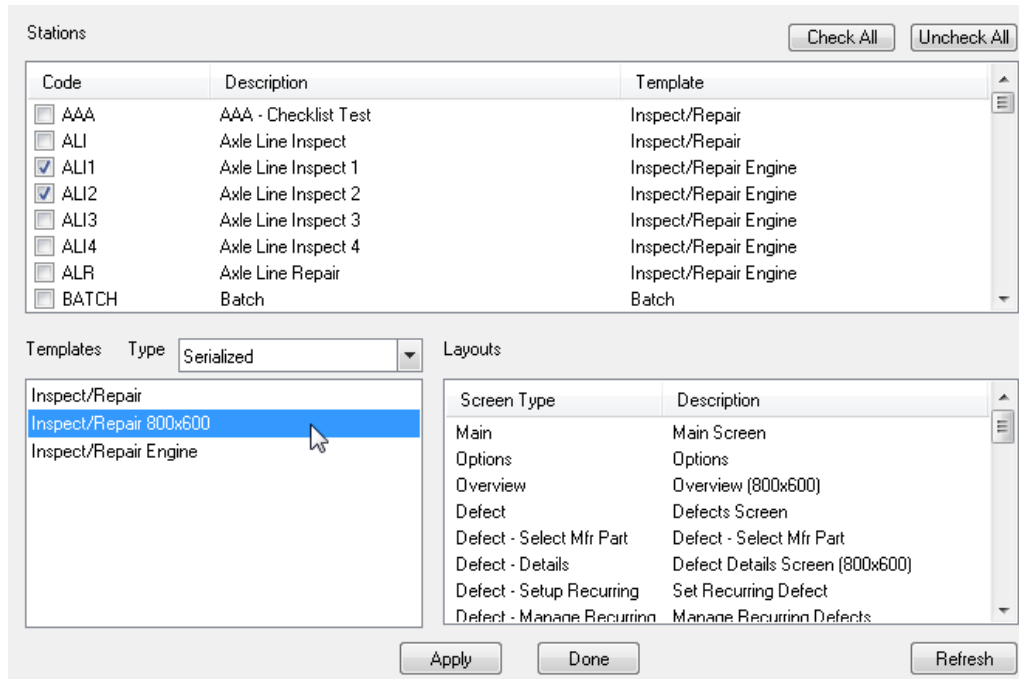
In order to speed up the start-up process for Data Collect and Auditor, instead of loading all views when logging in, there is an option in Station properties that will allow them to only be loaded when they're required.

14. Resize original size of views

The original size of views in Data Collect and Auditor can be changed in the station options.

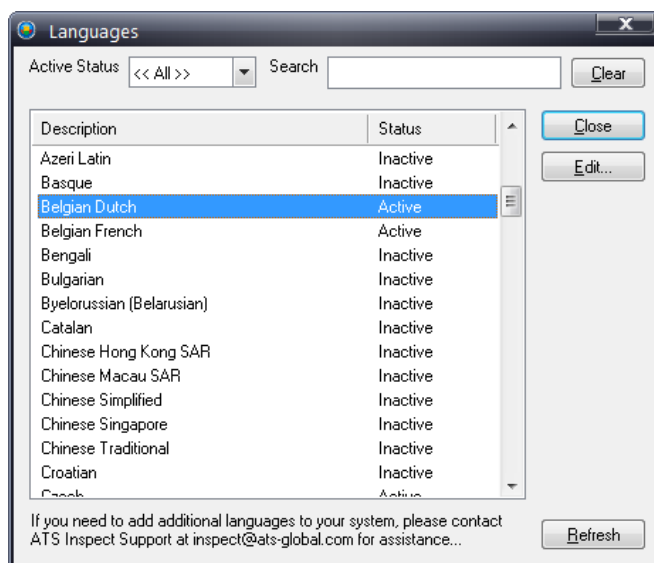
15. List of screens shown for selected template

When looking at layouts associated to stations the screens of the layout are also visible.



16. Make non-essential languages inactive

Languages can be hidden from the drop-down list in the task bar by setting them as inactive.



17. Instant update of checklist questions

When an existing checklist question has been modified, or a new one has been added, it can be made available on the production line instantly by pressing the new *Add to Units...* button. This ability is limited to questions that are assigned to categories.

Data Collect

18. Auto-select Detail

If only one Detail is available when a defect is being entered, it is automatically selected.

19. Defect Filter Mode button renamed

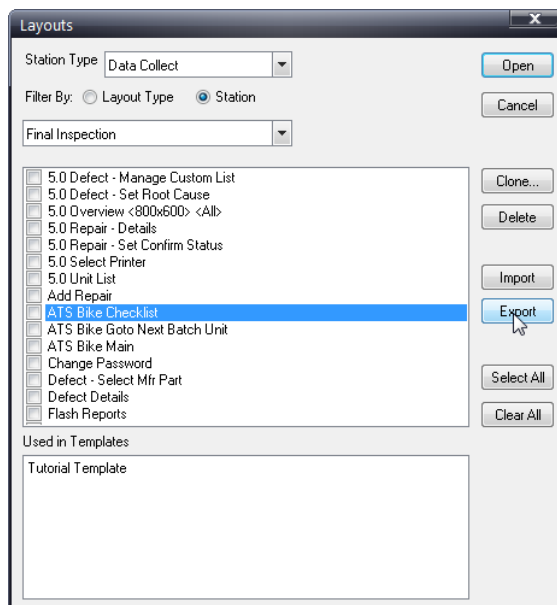
The Defect Filter Mode button has been renamed on the Main screen and the Overview screen as follows:

- Main screen: Defect Source Filter Mode.
- Overview screen: Defect Status Filter Mode.

Layout Manager

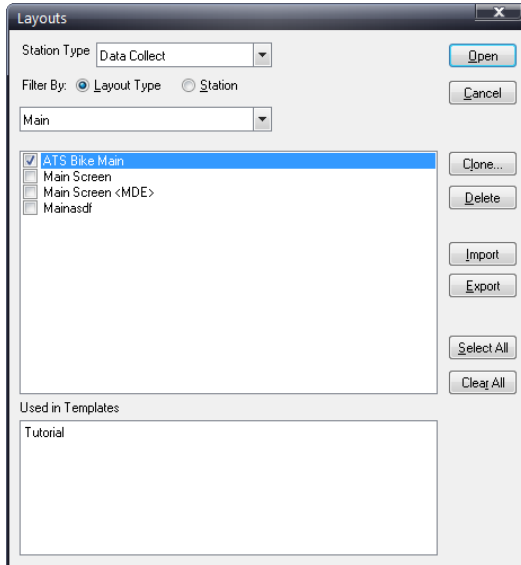
20. Transfer layouts between databases

It's possible to transfer a layout from one database to another. The layouts are exported from the first database as .xml files and can then be imported by the second database in the same format.



21. View layout, template and station relationships

When opening a layout it is now possible to see which templates they belong to by selecting them.



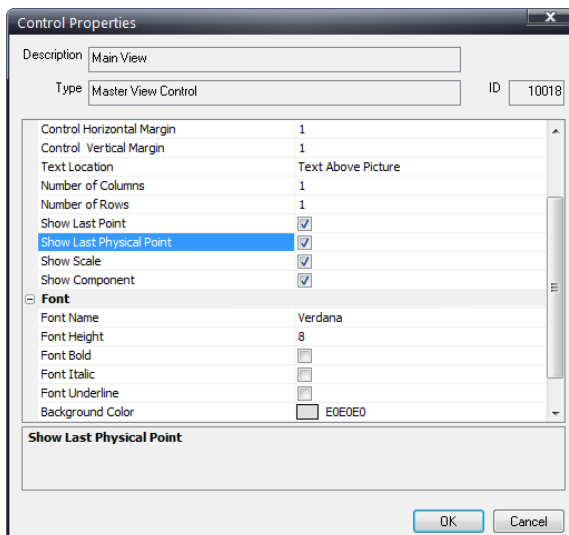
It is also possible to see a list of stations that a template is related to when viewing templates.

22. Display and Hide Main View Information

The information displayed below the main view can now be optionally hidden. The available information is:

- Last Point
- Last Physical Point
- Scale
- Component

These options can be changed in the properties of the Master View control as shown below:



Reporting

23. MFR Part Number in Raw Data Dump report

A column showing the MFR Par Number is now available in the Raw Data Dump report.

24. Regenerate and delete questions

The administrative tasks tab now allows you to regenerate and delete checklist questions for specific units.

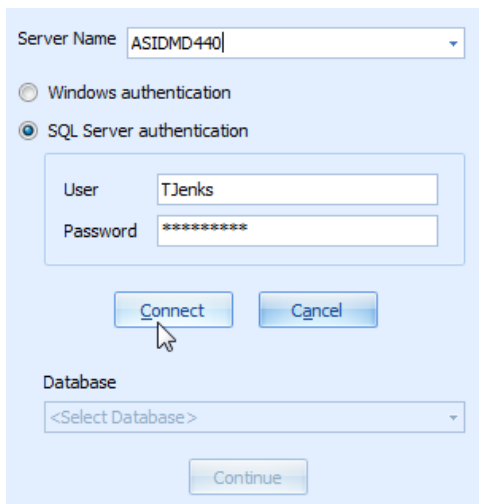
25. Modified Defect Removal/Correction Filter

In Defect Removal and Defect Correction it is now possible to filter by Recording Area, Group or Station instead of just Recording Station.

Security Manager

26. Login rights

A user must either have super user rights or rights for logging into Security Manager in order to log in to Security Manager.



27. Additional security rights

The following possible security rights have been added:

- Admin - Modify Checklist
- Admin - Add Checklist Questions to Unit
- Admin - Modify Costing
- Admin - Modify Variable Setup
- Admin - Modify CAP Setup
- Data Archiver – Login

General

28. New Services

Two new services have been added:

- ATS Inspect WCF Comm Service
- ATS Inspect WCF Data Service

ATS Inspect Comm Service has been removed.

29. Default Service Ports

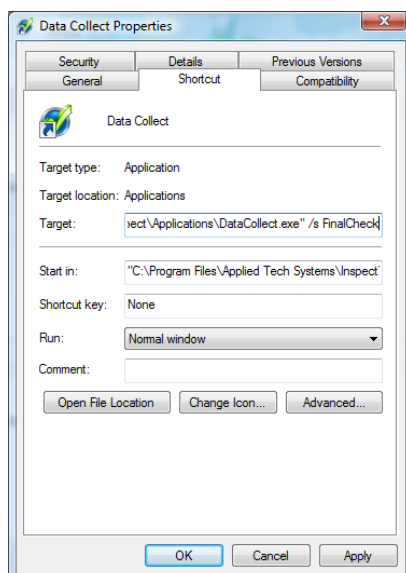
The Service ports have been re-numbered for .NET services as follows:

Service Name	End Point
ATS Inspect WCF Checklist Service	net.tcp://<servername>:8200/WcfChecklistService/
ATS Inspect WCF Traffic Service	net.tcp://<servername>:8300/WcfTrafficService/
ATS Inspect WCF Traffic Service (subscriber)	net.tcp://<servername>:8301/WcfTrafficService/Subscriber/
ATS Inspect WCF Traffic Service (publisher)	net.tcp://<servername>:8302/WcfTrafficService/Publisher/
ATS Inspect WCF Comm Service	net.tcp://<servername>:8400/WcfCommService/
ATS Inspect WCF Comm Service (subscriber)	net.tcp://<servername>:8401/WcfCommService/Subscriber/
ATS Inspect WCF Data Service	net.tcp://<servername>:8500/WcfDataService/
ATS Inspect WCF Travel Service	net.tcp://<servername>:8600/WcfTravelService/

30. Startup Switches

The majority of the Startup Switches have now been removed as they are now implemented within the various programs.

The only one remaining is /s which will work for Data Collect and Auditor. For example `DataCollect /s FinalCheck` can be used as follows:



31. Locked units

It is now possible to lock a unit so that it cannot be modified.

32. Supported platforms

The platforms supported by Inspect has been expanded to contain all of the following:

- Windows XP (32-bit or 64-bit)
- Windows Vista (32-bit or 64-bit)
- Windows 7 (32-bit or 64-bit)
- Windows Mobile 5.0 or higher **
- Windows Server 2003 R2 (32-bit or 64-bit)
- Windows Server 2008 (32-bit or 64-bit)
- Windows Server 2008 R2 64-bit

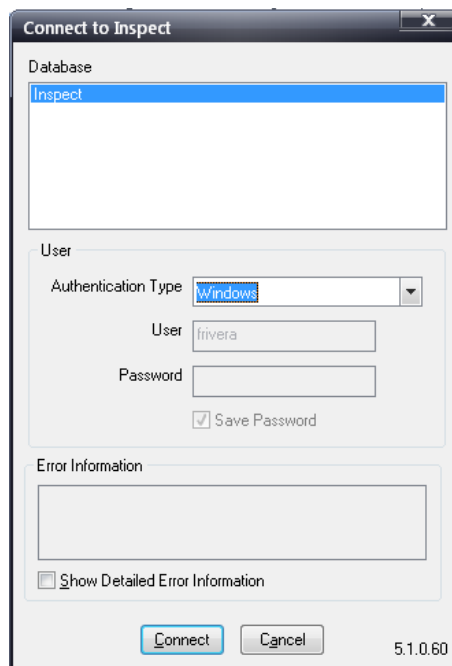
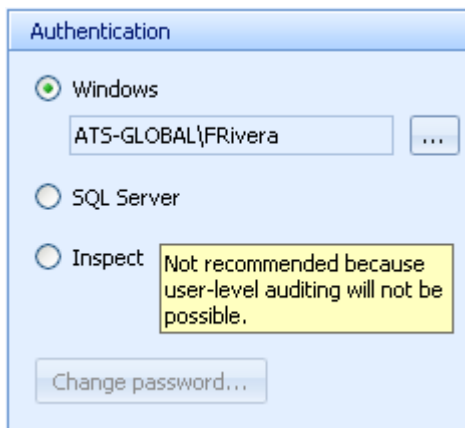
New Features in ATS Inspect 5.2

1. Windows Authentication

Windows authentication is now available. Each user can be mapped to a Windows account within the domain; therefore, entering user and password is not necessary, as Inspect recognizes the current Windows user and matches it to the user in the Inspect database.

SQL Server authentication is also supported. These two methods are required for Table Auditing, described next.

Inspect authentication is still supported, but it is not recommended since user-level table auditing is not possible.



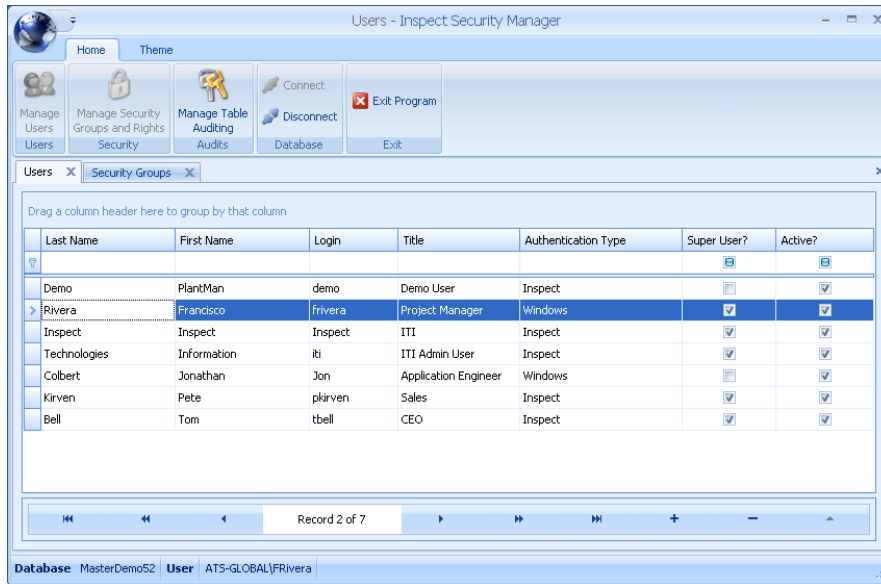
2. Table Auditing

Inspect can now detect and record any modifications to any table in the system, such as defects and repairs. All inserts, deletions and updates are logged along with the user who made the change, date and time, application where the change was made from and other parameters.

Table - audit.defects Summary									
sys_audit_id	sys_audit_action	sys_audit_date	sys_audit_login	sys_audit_app	defect_id	unit_id	subcomponent_id	component_id	part_id
1	I	1/20/2010 4:57:35 PM	frivera	ATS Inspect Data Collect	6586	3369	NULL	126	90
2	D	1/20/2010 4:59:18 PM	frivera	ATS Inspect Data Collect	6586	3369	NULL	126	90
3	I	1/20/2010 4:59:51 PM	frivera	ATS Inspect Data Collect	6587	3369	NULL	117	82
4	I	1/20/2010 5:00:00 PM	frivera	ATS Inspect Data Collect	6588	3369	NULL	135	88
5	I	1/21/2010 12:03:16 PM	frivera	ATS Inspect Data Collect	6589	3371	NULL	1351	392
6	I	1/21/2010 12:03:21 PM	frivera	ATS Inspect Data Collect	6590	3371	NULL	1351	392
7	I	1/21/2010 12:03:24 PM	frivera	ATS Inspect Data Collect	6591	3371	NULL	1351	392
8	D	1/21/2010 12:04:26 PM	frivera	ATS Inspect Data Collect	6591	3371	NULL	1351	392
9	D	1/21/2010 12:04:26 PM	frivera	ATS Inspect Data Collect	6590	3371	NULL	1351	392
10	D	1/21/2010 12:04:26 PM	frivera	ATS Inspect Data Collect	6589	3371	NULL	1351	392
11	I	1/21/2010 12:04:46 PM	frivera	ATS Inspect Data Collect	6592	3371	NULL	1351	392
12	I	1/21/2010 12:04:51 PM	frivera	ATS Inspect Data Collect	6593	3371	NULL	1351	392
13	I	1/21/2010 12:04:55 PM	frivera	ATS Inspect Data Collect	6594	3371	NULL	1351	392
14	I	1/25/2010 3:01:06 PM	frivera	ATS Inspect Data Collect	6595	3372	NULL	96	81
15	D	1/25/2010 3:01:22 PM	frivera	ATS Inspect Data Collect	6595	3372	NULL	96	81
16	I	1/25/2010 3:02:04 PM	frivera	ATS Inspect Data Collect	6596	3372	NULL	96	81
17	D	1/25/2010 3:02:42 PM	frivera	ATS Inspect Data Collect	6596	3372	NULL	96	81

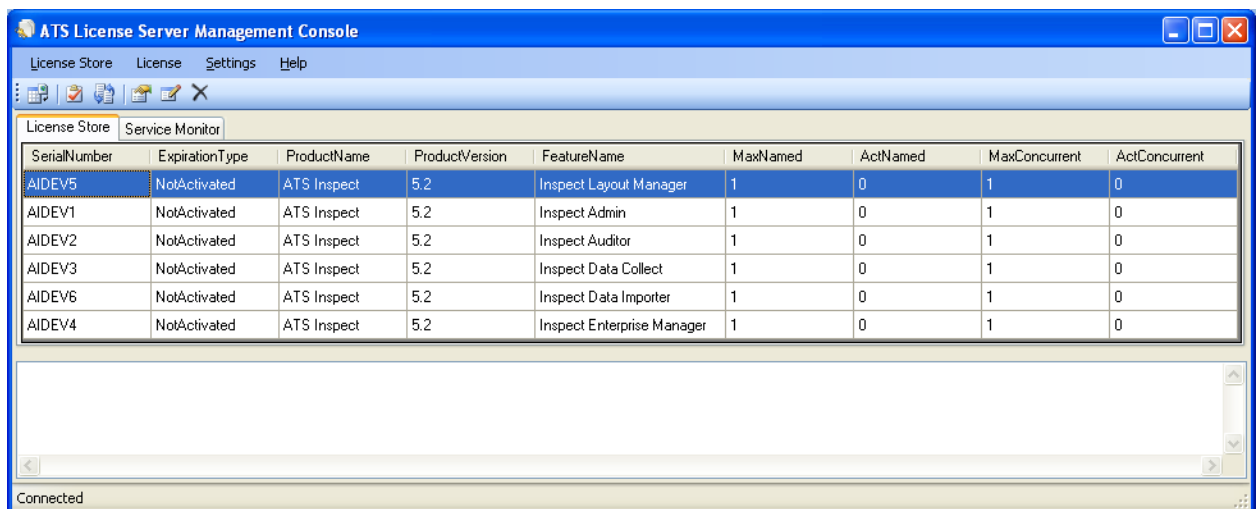
3. Security Manager

User configuration and Security Rights management have been removed from Admin and placed into the new Security Manager application. This allows multiple users to make configuration changes in Admin, while still maintaining total control on security privileges in the system.



4. Improved Licensing

The licensing mechanism has been completely rewritten to improve the response time at startup and friendlier user interface.

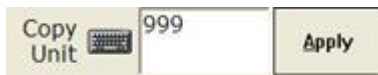


5. Multiple Defect Entry

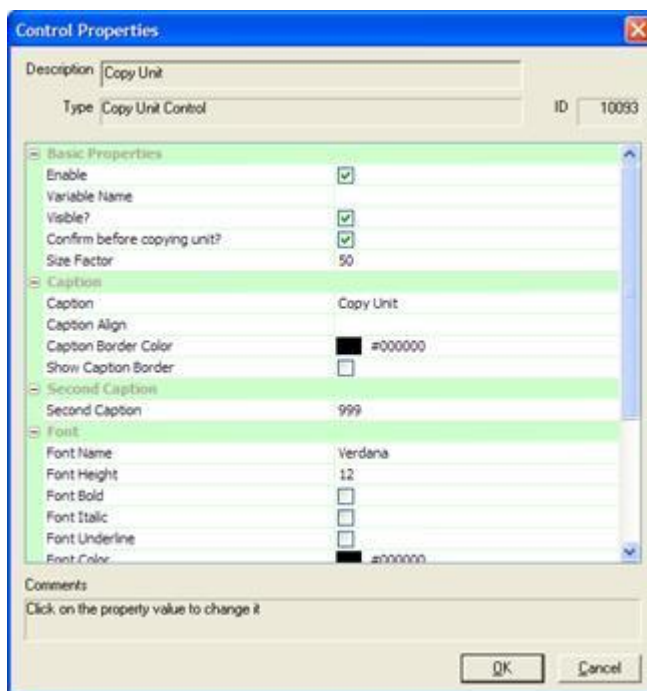
The automatic selection of a default rank while in Multiple Defect Entry mode has been updated. Now, the user will be required to select the rank before the defect is created.

6. New Copy Unit Control

The Copy Unit control is used to quickly copy the defects on a single unit to multiple units. In order to use this control, the user simply touches the edit portion of the control and a popup keyboard will appear. The user should then enter the number of times to copy this unit and its defects. Once the quantity is entered, pressing the Apply button will copy the unit the specified number of times. When the copy process is complete, it will switch to the last unit created.

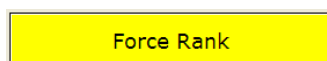


The Administrator can specify that the copy operation should be confirmed before being performed, if desired. This can be set in Layout Manager by activating the “Confirm before copying unit” property, as shown in the following image.

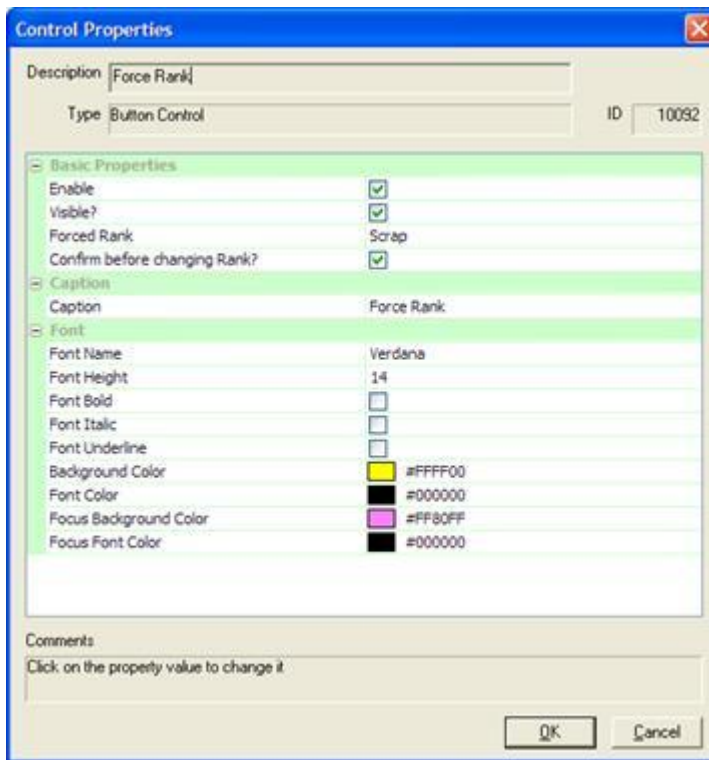


7. Force Rank

The Force Rank control is used to change the rank of all defects entered during the current inspection to whatever rank the user chooses. The user simply clicks the **Force Rank** button and all defects will have their rank changed. The caption on the button is fully editable. Only defects entered during the current inspection will be changed – any existing defects will remain at their current rank.

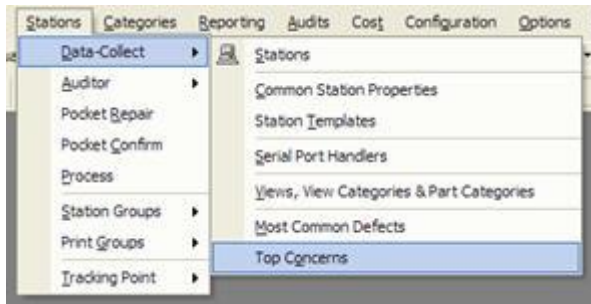


The desired rank is set by changing the Forced Rank property. The Administrator can specify that the rank change should be confirmed before being performed, if desired. This can be set in Layout Manager by activating the “Confirm before changing Rank” property, as shown in the following image.

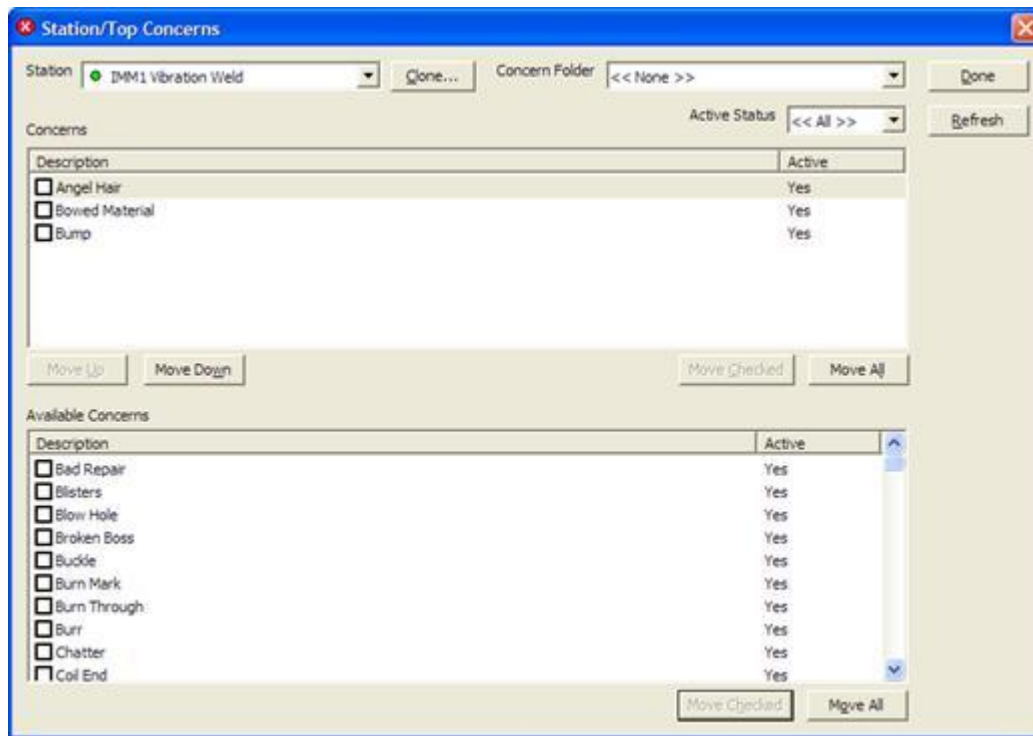


8. Station – Top Concerns

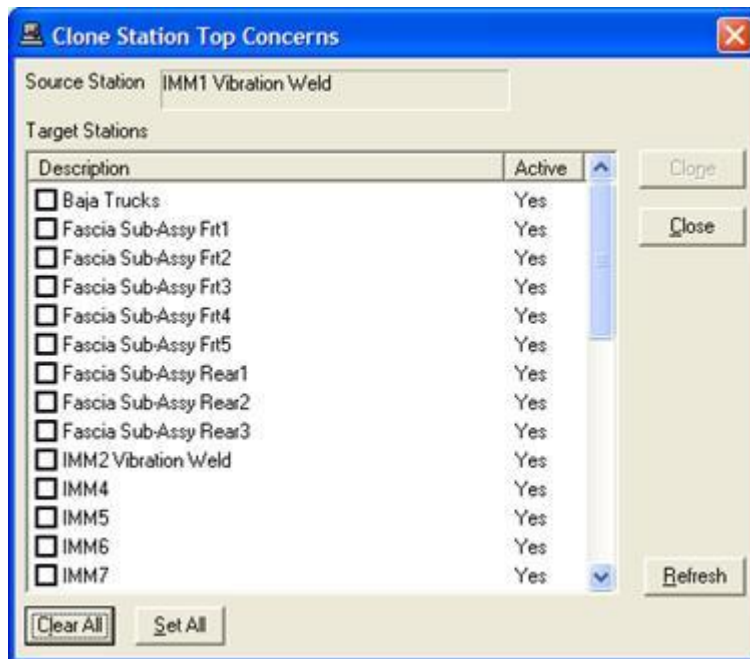
The capability to set the order of critical concerns has been added. It appears in the **Stations > Data-Collect > Top Concerns** menu:



Using this feature, the order of important concerns can be set in any order desired. The concerns associated to the station will be shown in the desired order (provided they are associated to the selected part).



The user can also copy a station's set of concerns (and their order) using the **Clone** button. If clicked, the following dialog will be displayed:

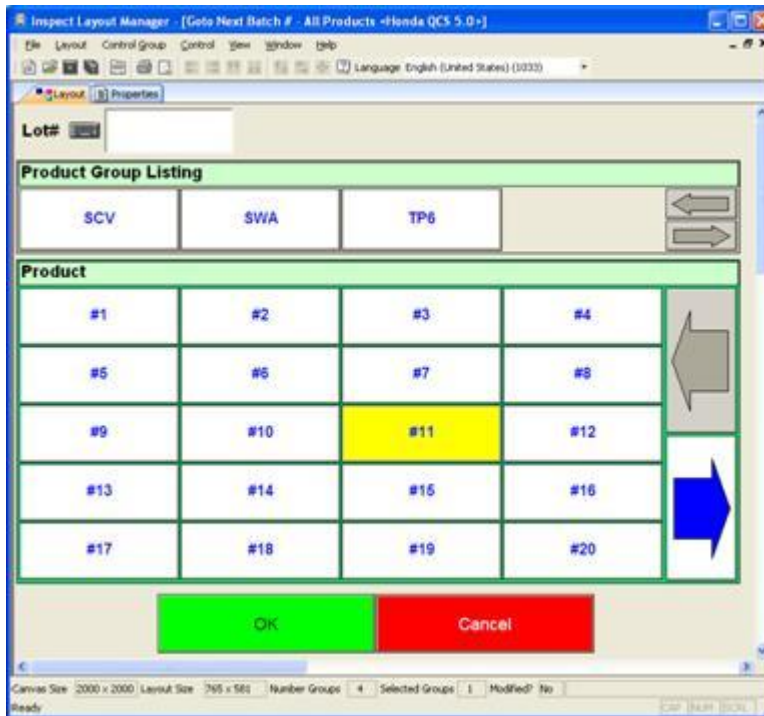


Please note that this is not a merge operation. Rather, it is a full replacement of the top concerns for a station. Any existing set of concerns for a target station will be removed.

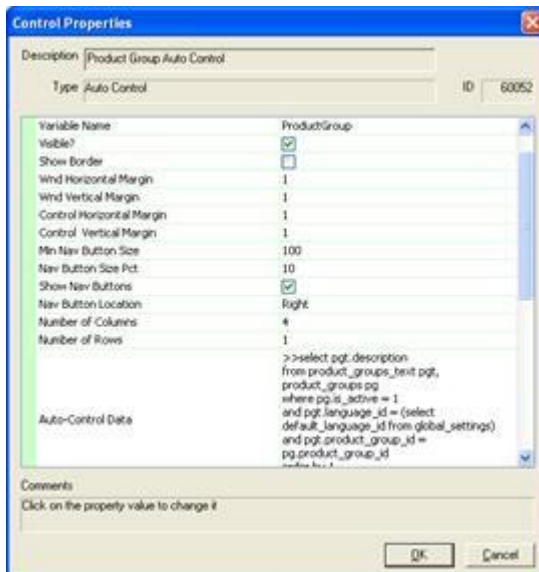
9. Dependent SQL Controls

Since Layout can execute SQL statements to display data on controls, it is now possible to limit the results from a statement depending on the value selected on a different control. In the example

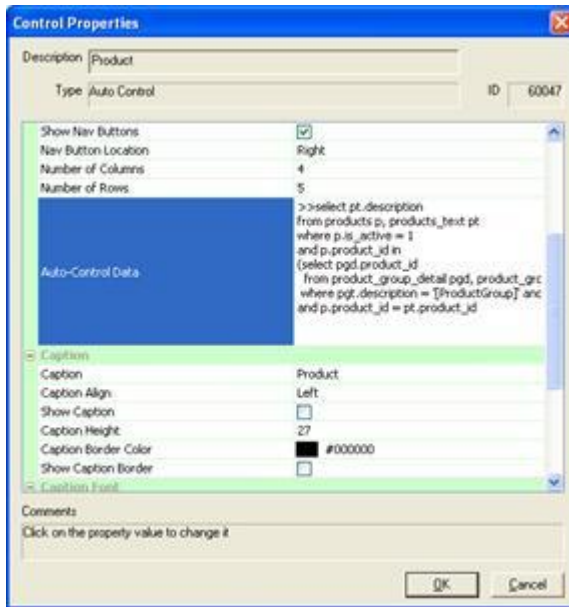
below, the layout shows two controls: Product Group and Product. The goal is to limit the products displayed in the latter, depending on the button selected in the first.



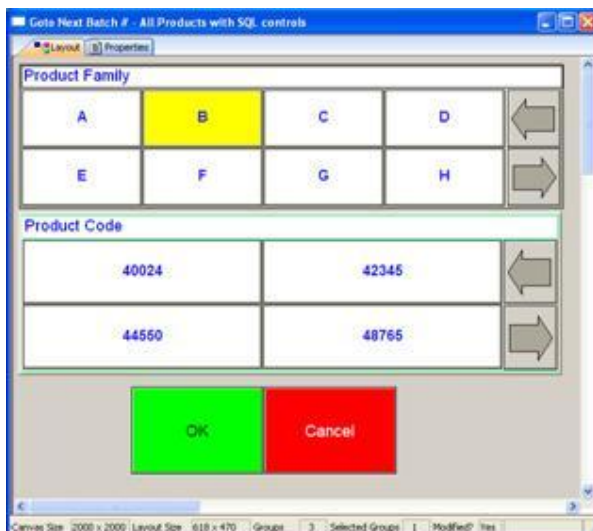
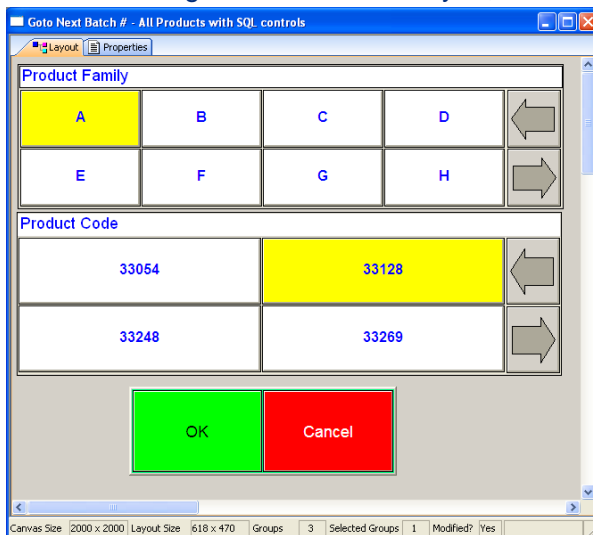
The following SQL statement provides a list of the product groups available, showing them in the top control. Notice that the name of this control is set to 'ProductGroup.'



The following SQL statement to display the data on the second control uses the runtime replaceable parameter name of the top control ([ProductGroup]) to limit the results.



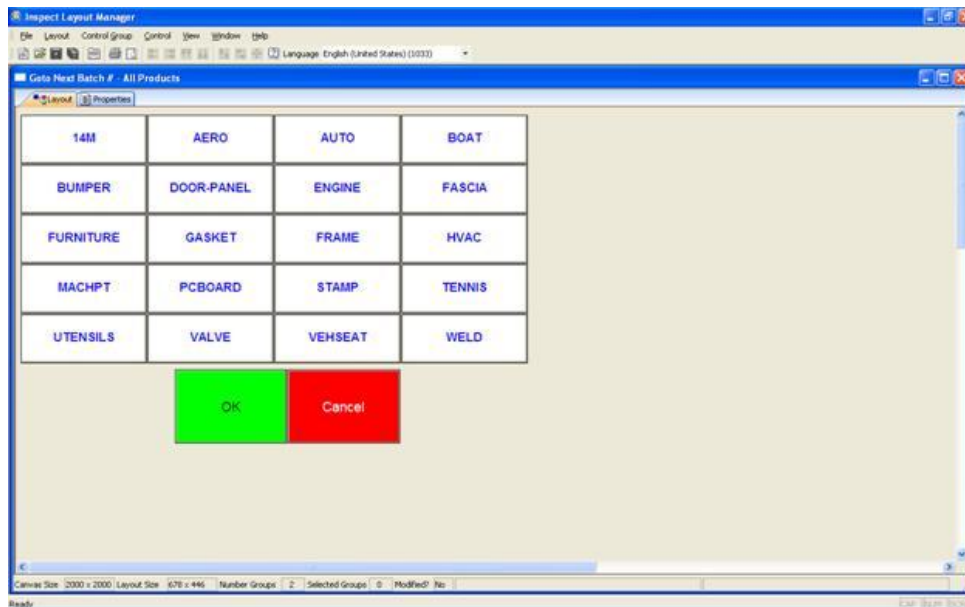
The first example below shows the Product Codes associated to Product Family 'A.' When the selection changes to Product Family 'B,' the List of Product Codes is updated accordingly.



10. Canvas Size on Layout Manager

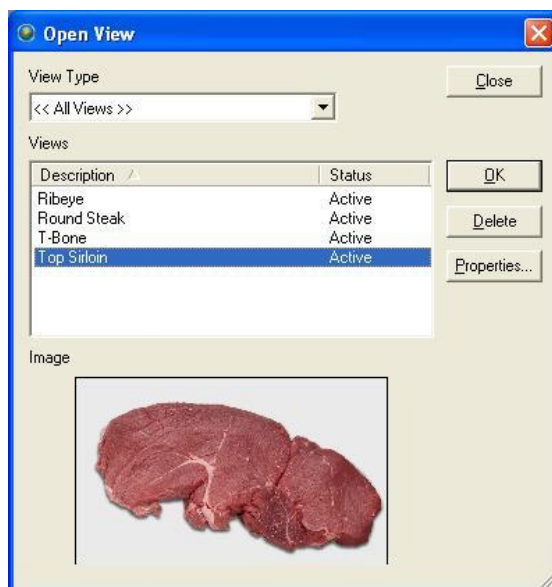
Layout Manager now has the concept of the 'canvas' – this is the allowable space in the screen where controls can be placed. This was introduced to avoid issues where controls could be left partially out of the layout and would therefore not appear on the screen.

With the canvas, the size of the layout is not actually specifically set. Instead, the size of the layout is defined by the location of controls on it – the size of the layout will be set as the minimum area to include all controls on the canvas.



11. Thumbnail View in Admin

You can now see a thumbnail preview of a view before opening it.



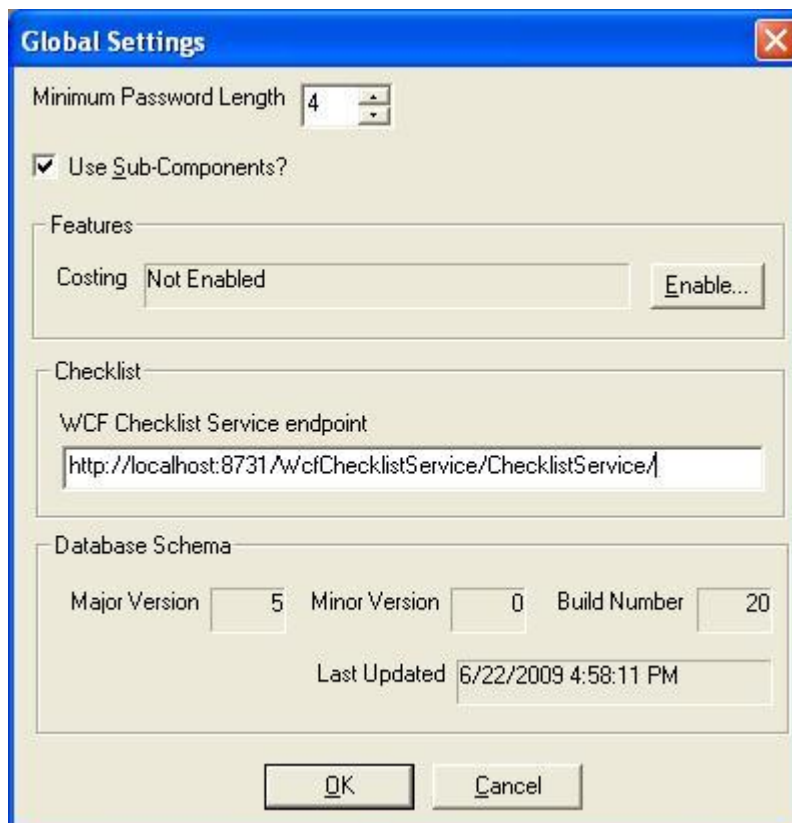
12. New Station Types

Several new station types have been added – these will be used in upcoming applications.



13. Reference to New Checklist Validation Service

In earlier versions of Inspect, the validation of checklist questions was performed within Data Collect. Now, this logic has been placed on a new service, which allows for future application and external systems to validate the answers to checklist questions.



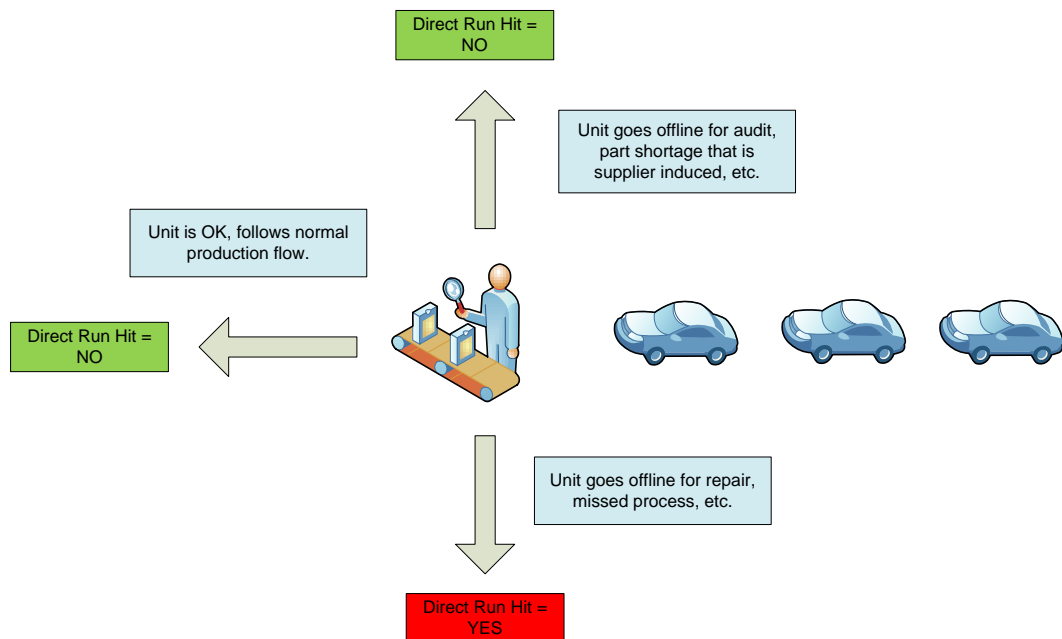
New Features in ATS Inspect 5.0

Admin

14. Direct Run

Due to customer requests, a new series of Direct Run reports have been added, driven by routing decisions made at key "gating" points in the plant. The intent of such reporting is to measure production efficiency to capture the number of units that go "offline" versus units that continue on the normal production path.

Even though the routing capability is already present, the reports who make use of this data will be available in the upcoming ARS.



15. Defects per Unit

Due to customer request we have added a series of reports that show information based upon defects per unit (DPU):

Total Defects / Total Units

These reports require that certain defects not be counted in the DPU reports. The criteria for excluding defects include:

- Type of Defect – filters can be set for Concern, Concern + Part combinations, etc. Wildcards are allowed.
- Responsible Area – filters can be set for areas that should not be counted. For instance there might be a "Supplier" area configured for Data Collect. Defects charged to such an area should not be counted as they are the fault of the supplier.

- Repair Types – certain repair types indicate that no defect existed. These might include "No Problem Found."

Even though the exclusion capability is already present, the reports who make use of this data will be available in the upcoming ARS.

16. Station Serial Port Handlers

Data Collect has long had the ability to receive messages via RS-232 serial ports to handle a number of tasks – most importantly the ability to log in a user and to switch units (via serial number or any of the three identifiers). The most common use of this capability is the attachment of RS-232 bar code scanners. The problem has been that there is no user interface for configuring the serial ports for a Data Collect station. This interface has now been added.

17. Most Common Defects

The Most Common Defect properties dialog has been changed to streamline the process and make it easier to use.

18. Security Rights

New security rights have been added to confirm/reject repairs entered by current users and other users. These changes were made for Data Collect and the upcoming PDA module.

In order to limit access to critical report settings, two new security rights have been added:

- Admin – Modify Report Settings – Classic
- Admin – Modify Report Settings – Advanced

The intent is to provide granular security to the features of both the Classic and upcoming Advanced Reporting modules. This affects options available under the "Reporting" menu item.

19. Part/Concern/Repair

This functionality has changed dramatically.

- Multiple responsible area/cell assignments are possible.
- Multiple rank group/default rank assignments are possible.
- Defects can be auto-repaired and auto-confirmed.
- Repairs no longer have responsible area/cells connected to them.

20. Root Causes

Root cause capability has been added to assign the true cause that a defect has occurred. For example, the defect might be "Water Leak" – a root cause of "Weatherstrip Missing," though, gives a more accurate indicator of the real reason the defect has occurred.

21. Default Concern/Repair Relationships

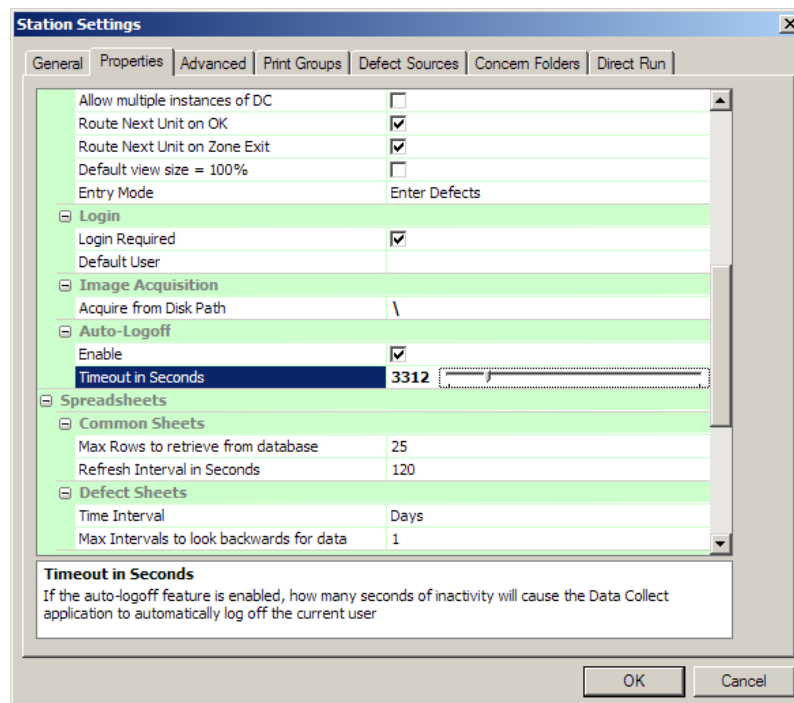
A simple change was made to this dialog. A new checkbox labeled "Automatically add Repairs to existing Concerns" was added. If this checkbox is checked, then dragging over a new repair to a concern will result in that repair being added to every part/concern combination for the selected concern.

22. Add Code to Checklist Questions

A new Code field was added to each question. It will be used in a future version of Inspect to allow for easier updates of a checklist question for a unit by external processes.

23. Auto Logoff Timeout

If Auto Logoff is enabled for a Data Collect or Auditor station, the timeout is now measured in seconds, not minutes. This was done to allow for a smaller minimum logoff time of 30 seconds as opposed to the existing 5 minutes. The auto-logoff timeout property now uses a slider control instead of a spin control to set the value since the range (30 to 21600) is so large. To move the timeout value in small, single step increments, use the left and right cursor keys (with the focus set to the slider control).



24. Dynamic Validation for Numeric Checklist Questions

Dynamic validation for number value questions has been added. It works exactly the same as it does for Text questions except that the database lookup must return two values – minimum and maximum acceptable value.

25. New Pass Option for Stations

A new option to always create a new tracking point pass for a unit (without a prompt) has been added. This is a station property and can be set individually as in other pass options. Using this option, a unit will have a new pass created every time it is viewed on a Data Collect station.

26. New Print Option for Checklists

A new property related to the printing of Checklist questions has been added. Previously all checklist questions for a unit would be printed without regard to whether the categories those questions belong to were associated with the station the ticket request originated from.

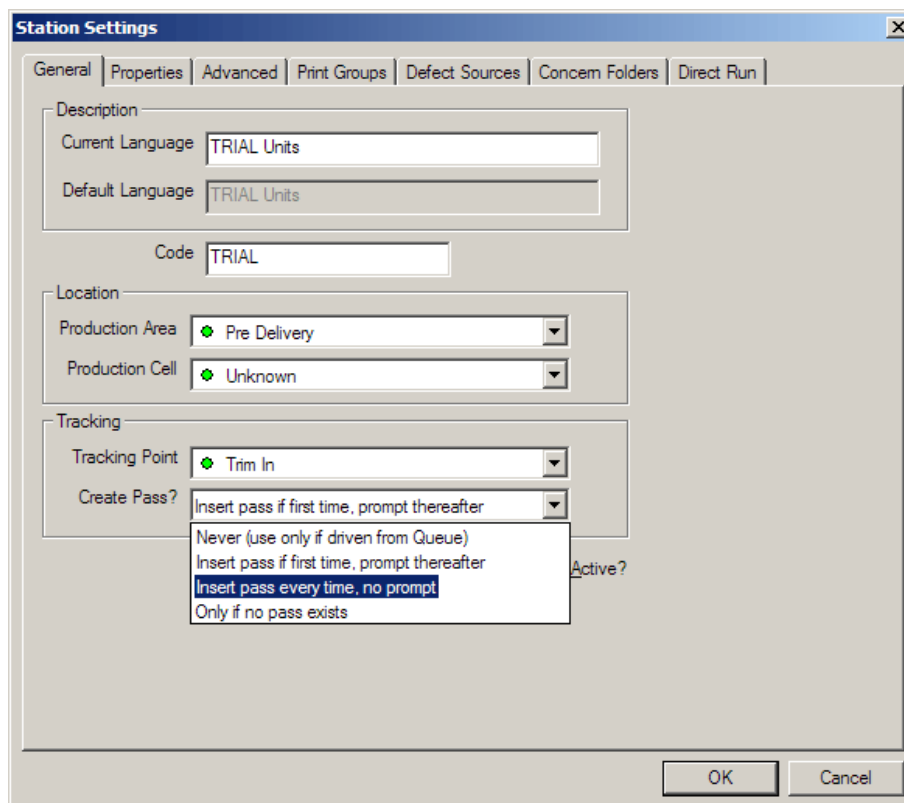
There is now a new Station Settings property, Checklist Options, that has two selections: "Print All Categories" and "Print only categories associated with this station."

27. Travel Service Ticket Type

In order to give Administrators control over the ticket type printed, a new property has been added for Data Collect stations. Currently there are four options available which are Basic, Basic with Bar coded Defect Id, Basic with Bar coded Defects IDs, Checklist (Letter, Landscape) and Basic with Bar coded Defects IDs, Checklist (Legal, Portrait).

28. Checklist Popup Mode

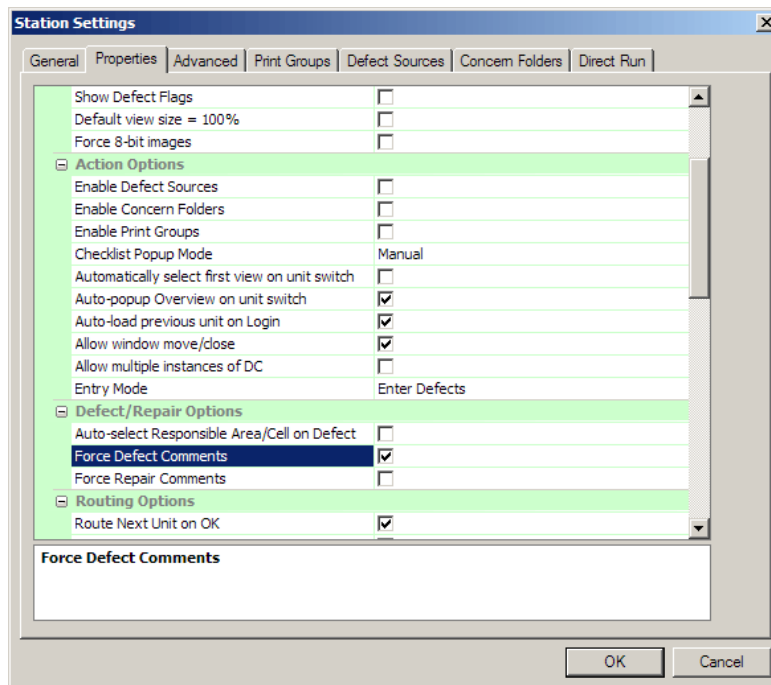
The ability to control when the Checklist appears is now configurable via the Station Settings. Previously the Checklist would always popup at the beginning of the inspection process. The configurable modes are Manual, When Inspection Begins, and When Inspection Ends.



29. Mandatory Comments for Defects and Repairs

It is possible now to require comments for defects and/or repairs entered at a station. This is done via the Properties tab of the Station Settings dialog.

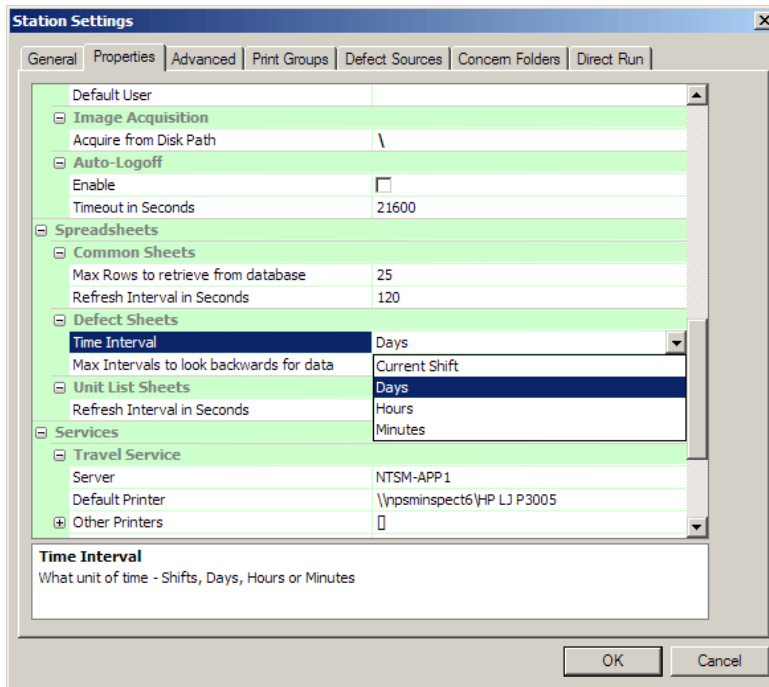
It is important to note that even if the "Force Defect Comments" or "Force Repair Comments" are checked, they will only apply to defects entered via the Defect screen, and the Repair screen for repairs. The Multiple-Defect-Entry mode supported by Data Collect does not support this option, since comments cannot be entered in that mode.



30. Spreadsheet Controls – Add Current Shift option

An option to show defects for just the current shift has been added. Previously only Days, Hours and Minutes, along with a "Max Intervals" option existed.

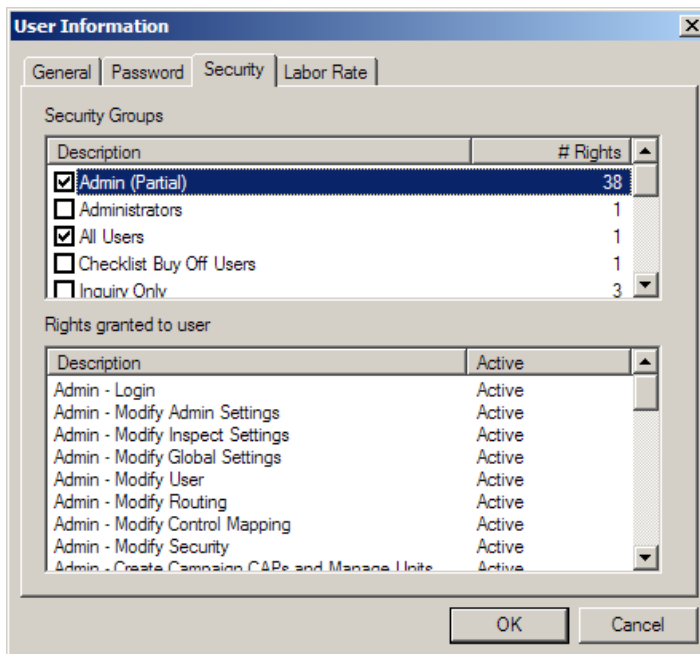
If the Administrator chooses "Current Shift" then the Max Intervals option will be hidden as it is not applicable. This feature is used for the "Top Defects by Area" and "Top Concerns By Area." It also applies to those same spreadsheet controls for Cell and Station.



31. User Properties

Improvements to the user properties setup have been made. Specifically the security information can now be entered for a new user without saving the basic information and then re-editing the information.

The Security tab now uses a checkbox list of available security groups at the top of the dialog and the cumulative rights granted to the user at the bottom. This makes it very easy to see what rights the user will have once the rights are saved.

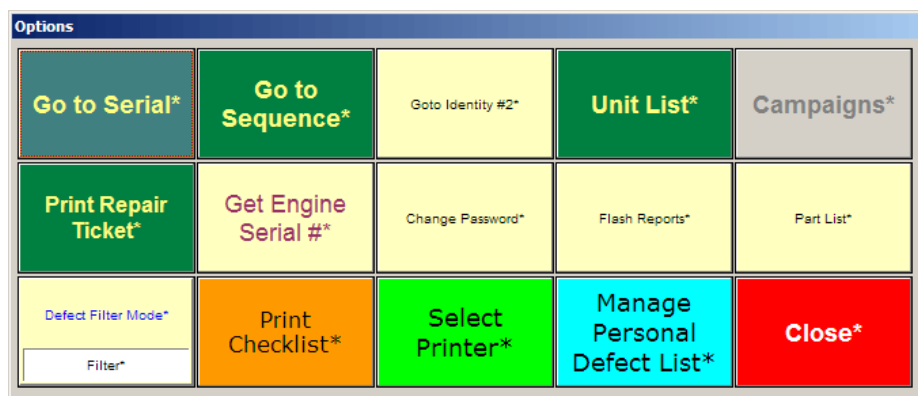


Data Collect

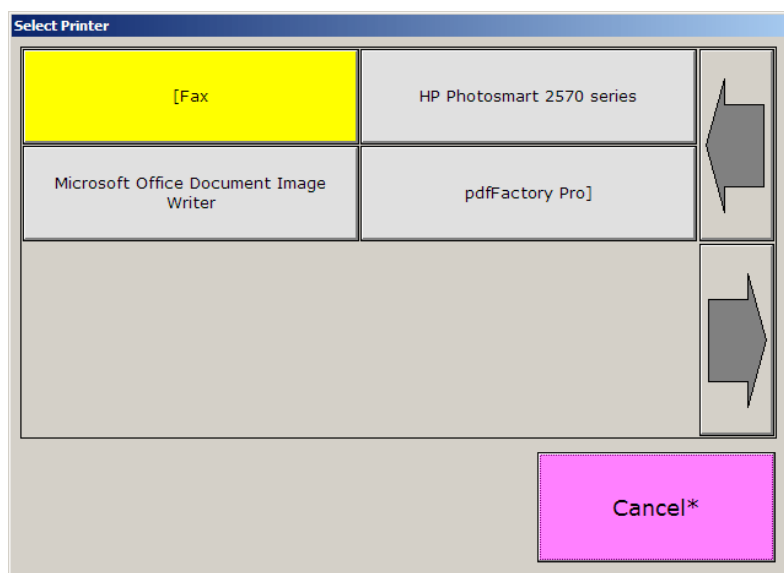
32. Allow Users to Select Non-default Printer in Data Collect

The ability to select from a list of printers has been added. The primary purpose is to allow access to another printer in the event that the default printer is not available.

To change the printer selection in Data Collect, the user would click on the "Select Printer" on the Options screen:



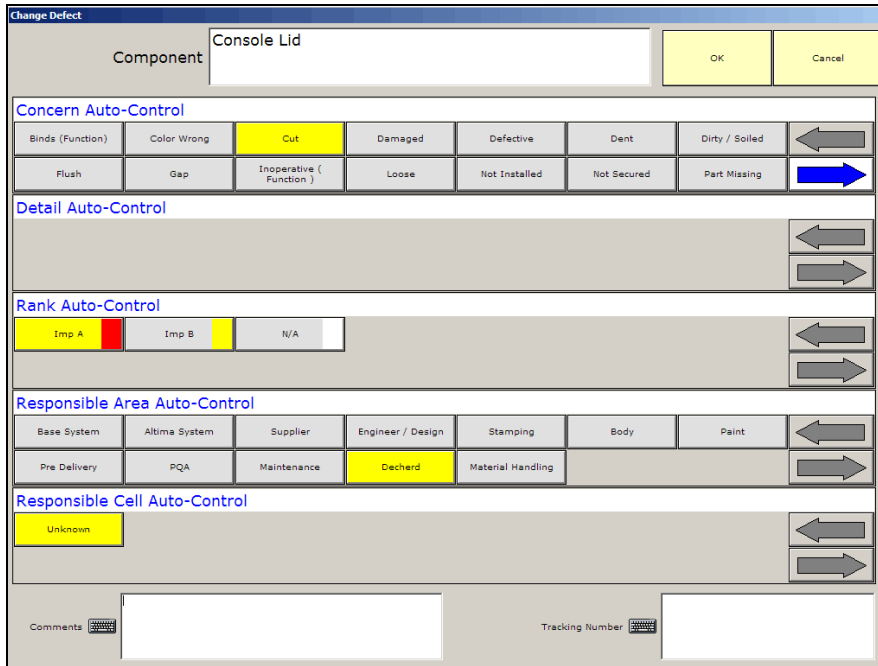
When the user clicks on the Select Printer button, the following screen will be shown where the user can override the default printer selection:



33. Change Defect and Overview screen general changes

- The "Change Rank" capability on the Overview screen has been enhanced and renamed. It is now called "Change Defect" and allows the user to change the concern, detail, rank, responsible area/cell and comments for a defect.
- Use of the new multiple responsible area/cell assignments based upon recording area and product (see Part/Concern/Repair changes in Admin section).

- Removal of the "auto-select responsible area/cell on repair" feature. Reason for the change: there is no longer a responsible area/cell tied to the repair.



Note that some of the items cannot be changed – Change Defect:

- Images cannot be added or removed. Use defect details instead.
- Qty
- Mfr Part

34. Overview

The Overview screen has a number of enhancements:

- Change Rank is now *Change Defect*. The new functionality is covered in the previous section.
- There is now a 'Set Root Cause' button that when pressed will popup the 'Set Root Cause' layout.
- There are now individual buttons that allow one-touch capability to set the different statuses for a completed repair: Confirm, Reject, Unconfirm and Unreject. This allows faster setting of the confirm/reject status.

Overview										
#	Status	Component	Concern	Detail	Rank	Root Cause	Record User	Record Station	Date/Time	Shift
1	Not Repair...	R/F Fender	Paint Sag		N/A	werjwelrkj	LCarmack	PDI Line 1 R/S Body	4/13/2007 4:08:26 PM	Day Shift
2	Repair...	Aux Power	Plug Damaged		N/A	werjwelrkj	EKutay	PDI Inspection	10/22/2007 6:00:03 PM	Day Shift
3	Not Repair...	Console Lid	Damaged		N/A	werlkj elrjlewkj	EKutay	PDI Inspection	10/22/2007 6:12:03 PM	Night Shift
4	Confir...	Console Lid	Cut		Imp A	werlkj elrjlewkj	EKutay	PDI Inspection	10/22/2007 6:16:55 PM	Night Shift
5	Confir...	Center Dome / Room Light	Loose		N/A	werjwelrkj	EKutay	PDI Inspection	10/23/2007 11:06:22 AM	Day Shift

Total Rows = 11 Page 1/3

Repair Defect	Undo Repair	Remove Defect	Defect Details	Repair Details	Change Defect	Select All	De-Select All	Prev Page	Next Page	Close
---------------	-------------	---------------	----------------	----------------	---------------	------------	---------------	-----------	-----------	-------

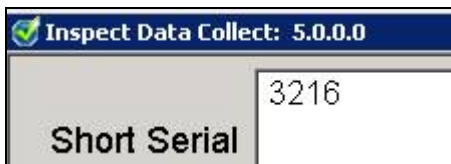
#	Status	Seq	Repair Type	Repair User	Repair Station	Date/Time	Shift

Total Rows = 0 Page 0/0

Add Task	Remove Task	Set Task Status	Move Task Up	Move Task Down	Next Page	Prev Page	Set Root Cause	Confirm Repair	Reject Repair	Unconfirm Repair	Unreject Repair
----------	-------------	-----------------	--------------	----------------	-----------	-----------	----------------	----------------	---------------	------------------	-----------------

35. Version Number added to Window Title Bar

To make it easier to spot out-of-date versions of Data Collect, the version number was added to the title bar for the application



36. Warning for possible duplicate defects

A check to see if defects (same part/location/concern) already entered has been added. If the sample part/location/concern is detected, a warning message will appear on the Defect Screen.

Enter Defect Information				
Component* Top* Roof*				Recurring Defect*
WARNING: Possible duplicate defect!*				
Concern*				
Bad Metal*	Bleed Thru*	Blisters*	Bulls Eye*	
Ding*	Dirt*	Fibers*	Fish Eyes/Craters*	

37. Custom Defect List

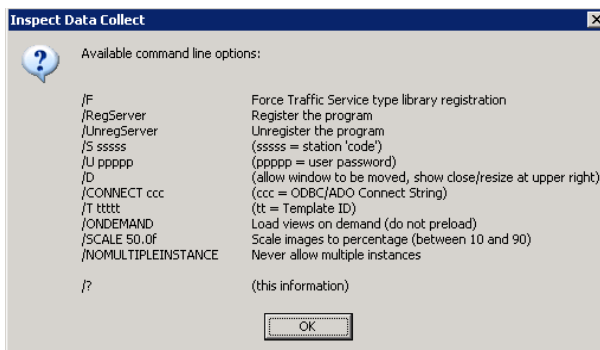
A method to save commonly occurring defects was added. There are two ways to add these defects: from the Defect Screen (when entering a defect), and from the Options screen (via the new Defects - Manage Personal List screen). The custom defects are tied to the current product and station where they are being used.

There is a new "Save Custom Defect" button that is available for the Defect screen. It can be added using the Layout Manager program

38. No Multiple Instances Command-Line Option

A command-line option to never allow multiple instances (regardless of setting for Station) has been added. The problem being addressed is that because station settings are dependent on the station selected, it can take up to ten seconds for the "Allow Multiple Instances" option to be known. This can cause problems when a user quickly double-clicks on a shortcut to launch Data Collect in quick succession.

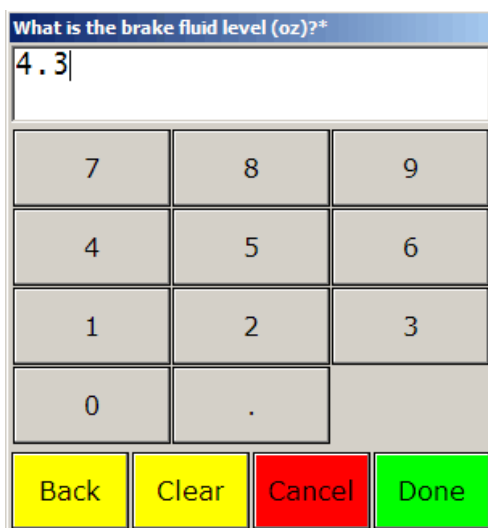
39. Scaling Command-Line Option



A command-line option to scale all picture displayed on a station from between 10 to 90 percent of the original size has been added. See the screenshot below.

To display the message box shown above and get a list of all available command-line options, type "DataCollect /?" from a command prompt.

40. Add Popup Keyboard capability to Text and Number Value Checklist Questions



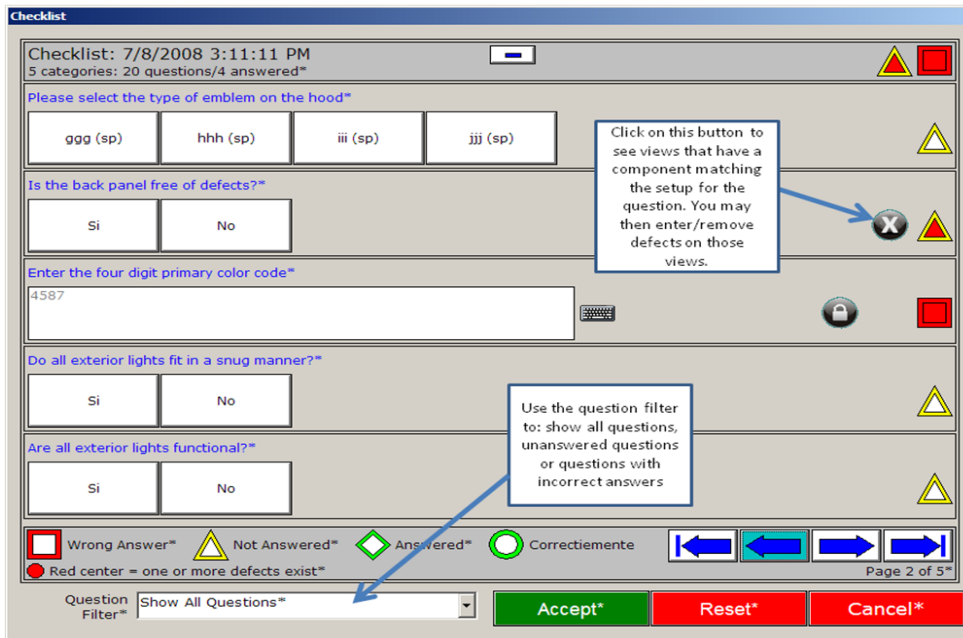
The ability to enter text and numbers without an external keyboard has been added. This feature works the same as all of the existing Self-Edit controls used throughout Inspect. The user simply touches anywhere within the edit control and a popup keyboard will appear.

The type of popup keyboard is based upon the question type: number value questions will show a numeric keypad, text questions will show an alphanumeric keyboard.

41. Checklist Layout Changes

The ability to filter checklist questions based upon their status has been added. The options are: Show All Questions, Show Unanswered Questions, and Show Wrong Answers.

The ability to enter defects against views has been added. In the checklist question setup there is the ability to associate the question to a part + location (i.e. component). The checklist, when presented, checks to see if there are any views that have a component matching the component associated with the question. If at least one such view exists, the "Enter Defect" button will be shown for the question.



If the user clicks on the "Enter Defect" button, the Checklist – Defect layout will be displayed:

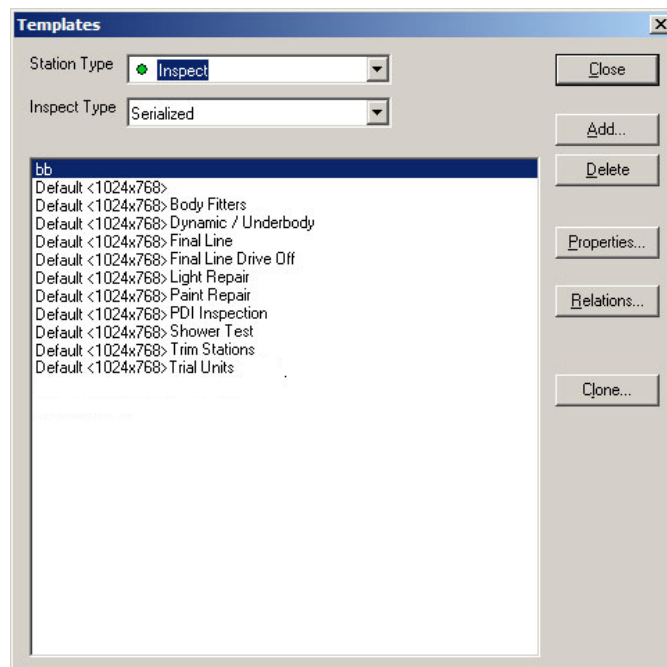


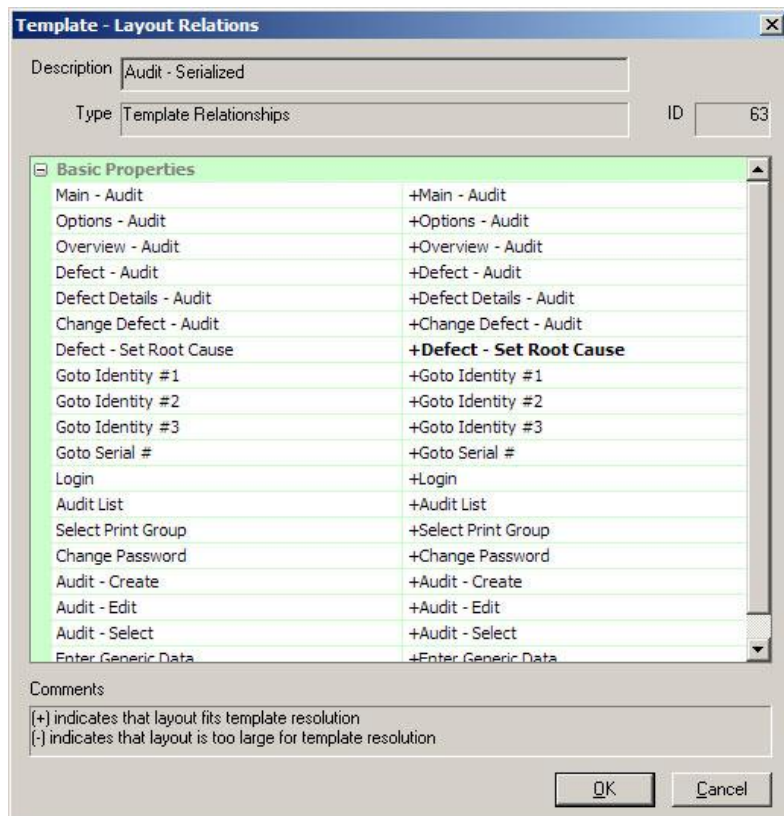
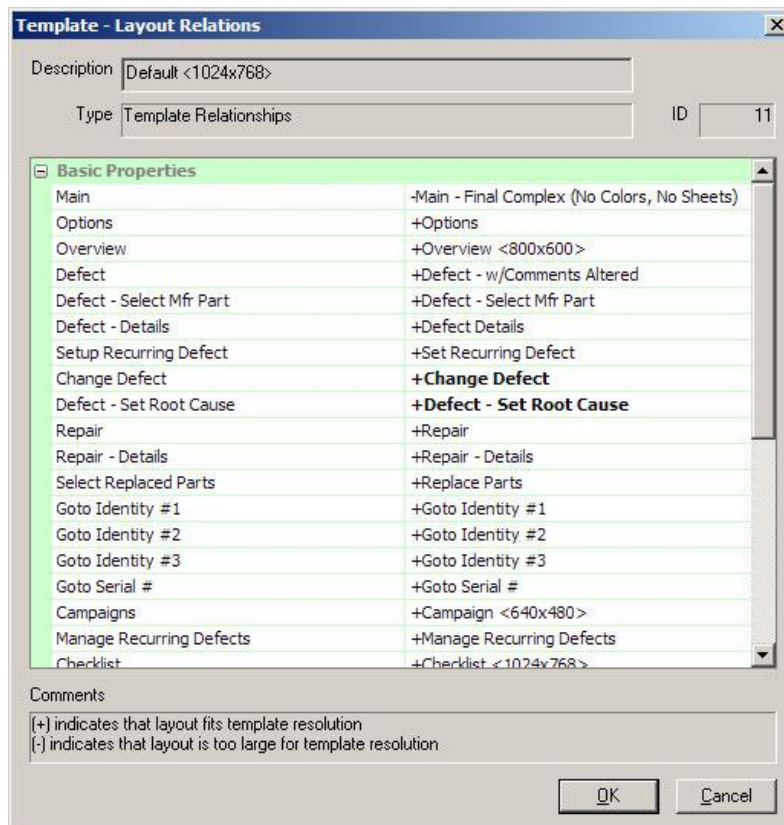
Any existing defects will be displayed and the user can enter defects against any of the available. The user may also remove defects by changing the Defect Mode to "Remove".

Layout Manager

42. Templates Filter

Due to the addition of the upcoming Auditor module, it was necessary to add a station type to help filter templates based upon the type of station (Data Collect or Auditor) the template will be used for. This change, while minor, shows up in a number of different dialogs in Layout Manager.





Classic Reporting - Admin

43. Unit Checklist Removal

The ability to completely remove a checklist has been added. The user only has to provide a valid unit identifier (Model Year + Serial/Identity #1/Identity #2/Identity #3) combination and if a checklist exists it will be displayed, along with a "Delete" hyperlink. If the user clicks on the Delete hyperlink the checklist will be permanently removed.

The screenshot shows the 'Unit Checklist Removal' administration task in the ATS Inspect web application. The main content area displays a 'Delete' link and a table with unit details. Below this is a 'Checklist' table with columns for Question, Status, Entered Value, Date/Time, and Entered by. The right-hand sidebar contains configuration options for the 'Unit Checklist Removal' task, including 'Show SQL?', 'Model Year' (set to 2002), and 'Identifier Type' (set to Identity #1* with value 8888).

44. Defect Correction

Additional criteria have been added, and the ability to change the responsible area + cell is now possible. The new criteria are Model Year and Build Group. The ability to change the responsible area + cell is also available now.

Reports – Criteria

45. Searching

Search capability was added for custom criteria. The search capability has been enhanced to filter out all items not meeting the text in the Search field. Previously the user would just be taken to the page where the text first appears (searching from left to right). Now the user can filter out all items that don't have the "search" text somewhere in the description.

This capability works the same for non-custom and custom criteria. Here is a screenshot of the new selection screen.

Note that the "ALL ***" option no longer appears along with the items, it is now a separate button above the list of items.

Part*	ID*
A/C Adjustment Bracket*	46
A/C Adjustment Rod Bracket*	215
A/C Assy Bracket*	47
A/C Belt Adjustment Bracket*	210
A/C Bottle Bracket*	477
A/C Bracket*	50
A/C Eye Bolt Bracket*	205
A/C Mounting Bracket*	52
A/C Support Bracket 1*	53
A/C Support Bracket 2*	217
Air Dryer Mounting Bracket*	314
Air Supply Service Bracket*	587
Alternator Adjustment Bracket (DD)*	64
Alternator Adjustment Bracket BCat*	262
Alternator Eye Bolt Bracket*	67
Alternator Mounting Bracket*	69
Auxiliary Air Supply Mount. Bracket	527
Battery Box Bracket*	318
Belly Bar Bracket*	320
Bumper Bracket*	326
Cab Mounting Bracket*	328
Center Bearing Bracket*	512
Chassis Skirt Mount. Bracket*	530
Exhaust Bracket*	331
Fan Hub Bracket (C10)*	114

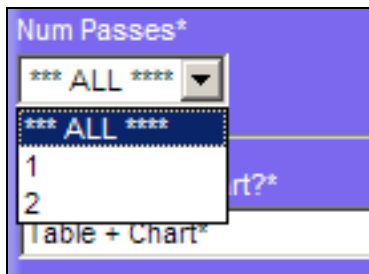
46. Custom Criteria Multiple Selection

Users can now select multiple items in any of the Custom Criteria options.

Reports

47. First Time Quality

A filter for the number of passes to include was added.



If the default "All" option is selected, the report will behave as it did in previous versions of Inspect. If the user chooses "1" then only first pass units will be counted (this includes defects). If the user chooses "2" then only 1st and 2nd pass units will be counted (this includes defects).

48. Checklist Summary

Drilldown capabilities and additional criteria have been added to the report. A new criterion to limit output to data collected by time has been added.

The new top-level of the report has drilldown capability on the number of questions answered for both totals and individual question status (Correct Answer, Wrong Answer, etc.):

Checklist Summary for* 1/1/1999 to* 10/1/2006 - 00:00:00 - 23:59:59

[Export to Excel* \(In New Window*\)](#)

Question*	Total*	Correct Answer*		Wrong Answer*		Not Answered*	
		#	%	#	%	#	%
Engine Compartment*							
Brake Fluid Level*	3	1	33.333	2	66.667	-*	-*
Air Filter present*	6	6	100.000	-*	-*	-*	-*
Fit & Finish*							
Back Panel*	5	3	60.000	1	20.000	1	20.000
Primary Color Code*	3	1	33.333	2	66.667	-*	-*
Check Exterior Lights - Fit*	4	3	75.000	1	25.000	-*	-*
Check Exterior Lights - Functional mmmmmmmmm mmmmmmmmmmmmmmmmmmmmmmmmmmmmmmmmmmmm mmmmmmmmmmmmmmmmmmmmmmmmmmmmmmmmmmmm	4	3	75.000	1	25.000	-*	-*
Back panel present*	3	2	66.667	1	33.333	-*	-*
Front Floor Mats present*	3	3	100.000	-*	-*	-*	-*
Documents/Labels*							
Customer*	1	1	100.000	-*	-*	-*	-*
Shipping Label*	1	1	100.000	-*	-*	-*	-*
Entertainment*							
Exterior Color*	1	1	100.000	-*	-*	-*	-*
Speaker Type*	4	2	50.000	2	50.000	-*	-*
Total*	38	27	71.053	10	26.316	1	2.632

Criteria*

Use Production Date?*	No*	Model Year*	*** ALL ****
Build Group*	Regular Production*	Product*	*** ALL ****
Recording User*	*** ALL ****	Category*	*** ALL ****
Question Type*	*** ALL ****	Generated at *	6/22/2008 4:08:24 PM

If the user clicks on any of the available hyperlinks within the report, they will be presented with the 2nd level of the report:

Checklist Summary for* 1/1/1999 to* 10/1/2006 - 00:00:00 - 23:59:59

Category*: Engine Compartment*

Question*: Air Filter present*

Question Status*: * ALL ******

[Export to Excel* \(In New Window*\)](#)

[Back*](#)

Model Year*	Serial #*	Identity #1*	Identity #2*	Identity #3*	Product*	Color #1*	Color #2*	Question Status*
2002	2HSCEAHR02C051198	9856	051198	647388F	9200*	9219	-*	Correct Answer*
9/13/2006 9:43:48 AM		Y			ekutay			
2002	2HSACAAMN22C046244	9800	046244	639933F	9100*	8183	0815	Correct Answer*
9/13/2006 10:18:53 AM		Y			ekutay			
2002	2HSCEAPR22C042956	8800	042956	633969B	9200*	9219	-*	Correct Answer*
9/19/2006 2:18:02 AM		Y			ekutay			
2002	2HSCEAMR52C035004	4000	035004	614739F	9200*	9219	-*	Correct Answer*
9/19/2006 4:14:28 AM		Y			ekutay			
2002	2HSACAAMN72C038091	7931	038091	623395B	9100*	5B38	-*	Correct Answer*
9/21/2006 10:18:41 AM		Y			ekutay			
2002	2HSCEAER82C038874	5846	038874	625342B	9100*	9219	-*	Correct Answer*
9/22/2006 10:52:23 AM		Y			ekutay			
Total*								6

Criteria*

Use Production Date?*	No*	Model Year*	*** ALL ****
Build Group*	Regular Production*	Product*	*** ALL ****
Recording User*	*** ALL ****	Question Type*	*** ALL ****
Category*	*** ALL ****	Generated at *	6/22/2008 4:09:21 PM

The hyperlinks on the 2nd level take the user to a Single Unit History report for the selected unit.

49. Single Unit History

The Single Unit History has been enhanced to show confirmation/rejection activity for each defect. In addition, all activity for a defect (repairs, confirmations, rejections) is grouped together for better readability.

Single Unit History

Product	Altima HEV	VIN	1N4CL21E08C196547	Interior Color	G
Plant	Smyrna	Sequence #	105808	Exterior Color	W40
Build Group	Production	Body #	196547		-
Lot Number	-	Identity #3	-		-
Prod Date	1/3/2008 12:05:00 AM				
Year	2008				

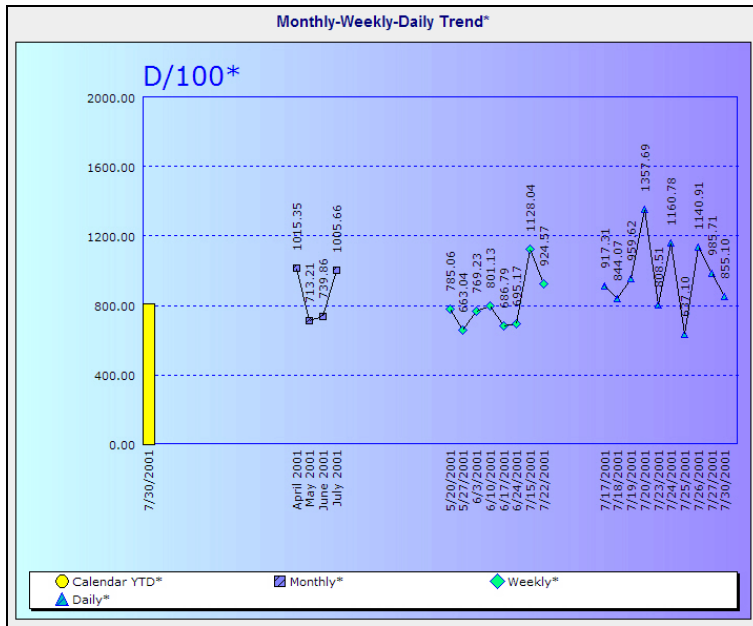
[Show Build Options](#)
 [Show Views](#)
 [Hide Defects + Repairs](#)
 [Show Checklist](#)
 [Show Tracking](#)

Defects

#	Qty	Area	Cell	Entered at	Entered by	View	Status	Track Number	Attached Images	Rank	
1	1	Paint	Unknown	Paint System 3	AWhite	Altima Front End	●	-	-	N/A (0.000)	
		1/3/2008 5:44:17 AM, Night Shift			Part Shortage Bumper / Fascia Front		-	228, 264			
		Pre Delivery	Unknown	Heavy Repair	RBluker		✓	Confirmed	-		
		1/5/2008 3:38:28 PM, Day Shift			Installed Part		Repair Hours	-	Labor Cost	0.00	
		PQA	Unknown	PDA (Buyoff)	GGriffin						
		1/6/2008 9:06:18 PM, Night Shift									
2	1	Paint	Unknown	Paint System 3	AWhite	Sedan Rear	●	-	-	N/A (0.000)	
		1/3/2008 5:44:29 AM, Night Shift			Part Shortage Bumper / Fascia Rear		-	161, 231			
		Pre Delivery	Unknown	Heavy Repair	RBluker		✓	Confirmed	-		
		1/5/2008 3:38:28 PM, Day Shift			Installed Part		Repair Hours	-	Labor Cost	0.00	
		PQA	Unknown	PDA (Buyoff)	GGriffin						
		1/6/2008 9:06:18 PM, Night Shift									

50. Monthly-Weekly-Daily Trend

The Calendar Y-T-D report has been added. It appears in both the chart and in the data table. It will show data from the first day of the year (based upon the base date) through the base date.



Series*	Date*	Sample*	Defects*	Bad Units*	D/100*	Pct Bad*	Pct OK*
Calendar YTD*	7/30/2001	7,296	59,377	5,939	813.83	81.401	18.599
Monthly*	April 2001	1,023	10,387	904	1,015.35	88.368	11.632
	May 2001	999	7,125	942	713.21	94.294	5.706
	June 2001	1,016	7,517	903	739.86	88.878	11.122
	July 2001	495	4,978	599	1,005.66	100.000	-*
Weekly*	5/20/2001	174	1,366	258	785.06	100.000	-*
	5/27/2001	257	1,704	298	663.04	100.000	-*
	6/3/2001	247	1,900	282	769.23	100.000	-*
	6/10/2001	265	2,123	308	801.13	100.000	-*
	6/17/2001	265	1,820	304	686.79	100.000	-*
	6/24/2001	207	1,439	264	695.17	100.000	-*
	7/1/2001	214	2,414	344	1,128.04	100.000	-*
	7/22/2001	232	2,145	318	924.57	100.000	-*
Daily*	7/17/2001	52	477	109	917.31	100.000	-*
	7/18/2001	59	498	133	844.07	100.000	-*
	7/19/2001	52	499	119	959.62	100.000	-*
	7/20/2001	26	353	96	1,357.69	100.000	-*
	7/23/2001	47	380	102	808.51	100.000	-*
	7/24/2001	51	592	126	1,160.78	100.000	-*
	7/25/2001	62	395	109	637.10	100.000	-*
	7/26/2001	44	502	141	1,140.91	100.000	-*
	7/27/2001	28	276	77	985.71	100.000	-*
	7/30/2001	49	419	138	855.10	100.000	-*

51. Concern Spectrum – Package

Additional filters have been added for Responsible Area + Cell.

Responsible Area*

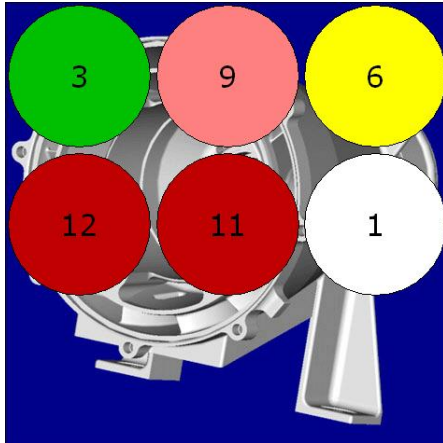
Paint* Change?*

Responsible Cell*

*** ALL **** Change?*

52. Concern Spectrum

The minimum number of columns and rows has been reduced to 3.



53. Control Charts

The ability to filter on multiple part/location combinations has been added. To accomplish this, the existing part filter was removed and a new Part/Location filter has been added in its place. It allows up to ten part/location combinations to be selected for the report. Also, the ability to hide certain sections of the report has been added. There are two options: Show Chart Only and Show Chart + Report.

This change was originally requested for only the p-Chart, but was added to all the existing attribute control charts.

Part/Location*	ID*
#1 Propshaft* Bottom Left*	520.29
#1 Propshaft* Lower*	520.6
#1 Propshaft* Middle*	520.7
#1 Propshaft* Rear*	520.4
#1 Propshaft* Upper*	520.5
#2 Propshaft Bottom Left*	645.29
#2 Propshaft Bottom Right*	645.30
#2 Propshaft Forward Left*	645.45
#2 Propshaft Forward*	645.47
#3 Propshaft	646.0
#4 Propshaft (sp)	647.0
1/4 Fender Tube* Left*	469.1
1/4 Fender Tube* Right*	469.2
3-Way ABS Connector*	665.0
A-Pads Harness* Left*	45.1
A-Pads Harness* Right*	45.2
A/C Adjustment Bracket*	46.0
A/C Adjustment Rod Bracket*	215.0
A/C Adjustment Rod*	204.0
A/C Assy Bracket* Left*	47.1
A/C Belt Adjustment Bracket*	210.0
A/C Belt* Front*	49.3
A/C Bottle Bracket*	477.0
A/C Bracket*	50.0
A/C Clutch/Pulley* Front*	51.3

Event Services

54. Reload Triggers

The need to manually reload triggers has been removed. This affects both the Event Services tab under the Reporting Module and also the *Event Monitor Inspect* service. Changes to triggers will be automatically loaded in approximately 30 seconds after any change.

The primary reason for this change was to eliminate the common problem of DCOM security which was required to force the reloading of triggers via the website.

Services

55. Traffic Service

The Traffic Service application has been rewritten using better technology – Windows Communication Foundation (WCF). Using WCF will eliminate the "blocking" that can occur when larger number of Data Collect stations connect to a Traffic Service instance. This change will be invisible to the end user.

56. Licensing Service

As part of the Service-Oriented Architecture that ASI DataMyte has implemented in other new products, we have integrated a new licensing service in Inspect 5.0. Licensing will control the number of applications in use for the DataCollect, Admin and Layout Manager programs. A 45-day trial license may be installed prior to obtaining a permanent license key from ASI DataMyte.

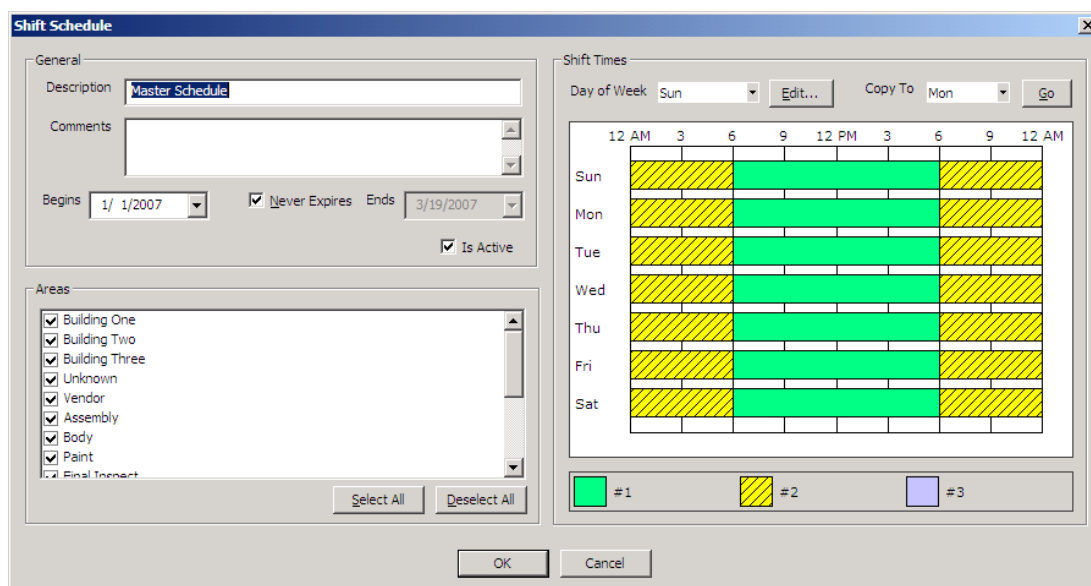
New Features in ATS Inspect from 4.1

This document describes new or enhanced features and program fixes for the version 4.1 release of the ASI DataMyte Inspect software.

1. New Shift Scheduling Setup in Admin.

The process for scheduling shifts for a plant has been greatly enhanced.

Important: The database structure changes required for the new design of the shift scheduling feature make it impossible to keep the previous shifts already created in previous Inspect versions. Any existing shift schedules will be lost after the upgrade is performed and will need to be re-created. Therefore, you will need to write down your existing shift schedules, or print screen captures from your exiting Inspect version, before installing v4.1.0.



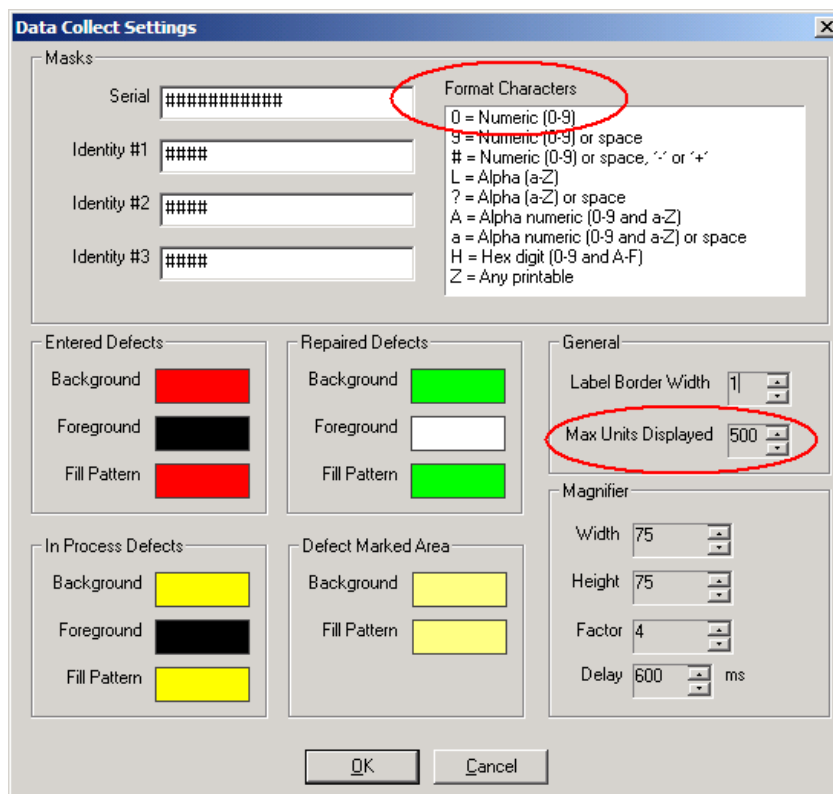
This enhanced feature has a variety of new functionality, including:

- A new 'Never Expires' checkbox can now be used to set that a shift schedule should never expire – when used, this option eliminates the possibility of a situation occurring where defects cannot be entered due to an expired shift schedule.
- When defining shifts, the administrator can now choose whether to assign the defects for a particular 'shift segment' to the previous, same or next day. This is very useful for night shifts that cross two calendar days within a single shift. A shift that runs from 6:00 pm to 6:00 am, for example, has two shift segments – one segment runs from 6:00 pm to midnight, while the other segment runs from midnight to 6:00 am. The administrator can now select whether to charge the defects from the morning segment to the day before or to charge the defects from the night segment to the next morning.
- Shifts are shown in a graphical display for each day, allowing the user to see 'at a glance' how the week's schedule is defined.

- Areas can now be added to a shift schedule through a simple checkbox interface available from the main schedule definition screen.
- A new optional 'Auto fix gaps and overlaps' checkbox sets Inspect to automatically fix any gaps in the schedule that occur as a schedule is being defined, preventing blocks of time from being unassigned to any shift or double-assigned to two different shifts.
- The schedule for a day can now easily be copied to other days in the week.
- The time is now represented by hh/mm and no longer includes seconds or breaks.

2. Increased Maximum Units Displayed and New Mask Characters for Data Collect

Data Collect can now be configured to display a maximum of 500 units in the Unit List. There are also new mask characters available for defining serial and identity masks. These settings are configured in the Admin module (Configuration > Settings > Data Collect).



3. Database Schema

When any Inspect application is launched, a check is now performed to verify whether or not the schema version of your database matches what the software is expecting. If it does not match, a warning message is displayed. The program is still allowed to launch even if a mismatch exists.

You can continue to use Inspect without regarding your database schema – however, it is likely that unexpected behaviors will occur if the database is not upgraded. It is recommended that you use the upgrade scripts detailed in the *Connectivity Kit* document (available on the Inspect program CD) to upgrade your database to the correct schema.

The Inspect database schema numbering system has been changed from two decimal separated numbers to three. These numbers indicate major changes, minor updates and build number. For example, schema 4.1.8 indicates the schema for major version 4, revision 1 and build 8.

4. Oracle Support

Oracle v9.2.6 and Oracle v10.1.3 databases are now supported using Data Direct v5.3 drivers.

5. Upgrade Scripts Merged

The scripts used to update an existing Inspect database to the latest schema have been combined into fewer scripts, allowing an upgrading user to complete the database upgrade more quickly.

6. Name of Application Displayed on Title Bar

When logging into Inspect Applications the heading – title bar of the login GUI for each application displays the name of the application.

New Features in ATS Inspect from 4.0

This document describes new or enhanced features and program fixes that were added in the version 4.0.0 release of the ASI DataMyte Inspect software.

1. New Checklist functionality for Data Collect.

Detailed checklists can now be defined in the Admin program for display to the Data Collect inspector, including those working with the DM4000 data collector. The questions included on a checklist prompt the inspector to review important areas for each unit, removing the need for paper checklists and allowing reports to be run that summarize the checklist data.

As shown in the example checklist above, questions can be simple Yes/No style questions, multiple choice questions, or text/number entry questions. Checklists can automatically file a defect when a question is answered incorrectly, thus making sure that errors are captured and repaired. For example, if the inspector answers that no air filter was installed on a vehicle, a defect of 'No filter installed' can automatically be entered.

During checklist configuration, the Inspect administrator can define various inclusion and validation settings for each checklist question.

- *Inclusion settings* define the conditions under which a question is included in the checklist. For example, a particular question may only be valid for certain shoe styles. Inclusion settings can be defined so that if the question is not appropriate for the unit being examined, the question will not be shown.

- *Validation settings* define the 'expected' answer for a question. For example, assume that a particular vehicle is supposed to have a multi-disc CD changer. When the inspector examines the unit, though, he finds that there is no CD changer installed. He therefore answers 'No' to the question regarding the presence of the multi-disc changer. Since the vehicle is supposed to have the changer, the 'No' answer is not the expected answer – therefore, a defect of 'Incorrect CD unit' might be automatically entered because of the validation settings.

When using the checklist, the Data Collect inspector is given different visual indicators as to the status of the questions: answered, answered correctly, answered incorrectly (which means 'not as expected'), and so on.

2. CAD File Import.

Inspect now supports the creation of views from vector images created in CAD systems. Only 2D AutoCAD (DXF/DWF) images are supported, but most CAD systems have the ability to convert images to the AutoCAD format.

These AutoCAD files can be used to create components, using closed non-circular vector objects within the file. This eases the addition of components when there are many objects in the file and removes some of the need for manual drawing of components on the views.

The Admin and Data Collect applications have been enhanced to accommodate viewing these larger AutoCAD files. Zooming and panning of views is now supported so that certain parts of a view can be seen more clearly.

The embedded X, Y coordinates internal to an AutoCAD file are shown in Admin, Data Collect, Reporting, Travel Tickets, and Event Services.

3. Image Capture for Defects/Repairs.

Inspect now supports the ability to attach images of specific defects to the defect record or images of specific repairs to the repair record, such as from a connected digital camera that supports the WIA protocol or from a specified folder location. Images can be attached at the time the defect is filed or repaired – they can also be attached from either the Defect Details screen or the Repair Details screen.

A small image icon is shown on a defect flag in Data Collect when there is a defect image or a repair image attached to the defect. The images are also available for viewing with the defects and repairs in the Single Unit History report.

4. View Enhancements

The ways in which images can be viewed and manipulated in DataCollect have been greatly enhanced in Inspect 4.0 – users can now zoom in/out more easily on images and can 'pan' through an image when it is magnified larger than the displayed view. These improvements generally apply to both raster (digital) images and vector (CAD) images.

Also, defect flags can now be hidden when viewing defects on a view. This can be helpful for views that have a large number of defects showing – defect flags often overlap each other on such views,

making it more difficult for the operator to discern separate defects. Each defect flag is now numbered, corresponding to the defect number on the Overview list for the view.

5. Enhanced Reporting Features

The following Reporting enhancements have been made in Inspect 4.0.

- Reporting users can now drill down to the Single Unit History report in the Number of Defects column in the following reports: Detail Report, Detail by Online/Offline, Repairs by Category, Repairs by Area/Cell.
- The Repair Type and Location have been added as filters to the following reports: Detail Report, Detail by Online/Offline, Repairs by Category, and Repairs by Area/Cell.

Program Fixes from 5.4

Corrected item	What it means
View not appearing in the checklist views.	View with part/location associated to checklist will not appear in the checklist views. TS 7401
Unable to select views from MDE screen.	Only the first view from the view picker control was functional on the MDE screen. TS 8286
Multi Station/Group Top Five report shows Error on Page.	The report won't run, displaying 'Error on Page' in the browser's lower-left corner. TS 8377
Repair comments not appearing in Repair Details control	Comments were actually in the database and also getting loaded into the CRepair instance in the Repair-Details layout but weren't being displayed in the control. TS 8575
Error Importing data with comm. service	The messages were not starting at the correct position. TS 8737

Program Fixes from 5.3

Corrected item	What it means
In Data Collect, the color text disappears when the text color is similar to the color itself.	The text cannot be seen against the color. TS 6998
In Reporting, Single Unit History is slow to generate.	The query does not complete at the bottom of the IE page. The report is visible but the query appears to still be running in the background. TS 7778
Part/Concern/Repair Extended Properties dialog shows all repair types.	Repair types should be limited to those associated to the selected part/concern IDs. TS 7791
Checklist Lookup Configurations require input on read-only parameters	Requires input on all parameter types. Should only force entry on input and input/output parameter types. TS 7794
Station Clone dialog contains incorrect text in default language.	The second field of the Station Clone dialog contained the code rather than the default text. TS 7797
Error when deleting user in Security Manager	An error is shown when attempting to delete a user in Security Manager. TS 7833
Error when adding user in Security Manager.	Unable to add users due to a duplicate key problem. TS 7840
In Security Manager, Rights are selected when the row is selected rather than just the checkbox.	When the user selects a row the checkbox is automatically selected/unselected. This should only happen when the checkbox itself is selected. TS 7843
In Mobile Checklist, settings.xml file does not appear in the application folder on the device.	The installer is not installing the settings.xml file. TS 7850
Total Count discrepancy for AVES Audit Reports	Some total count discrepancy when running AVES audit reports with V1=, V1, and V2 rankings. TS 7858
Duplicate key error messages on DC	Stored procedure fails due to a duplicate key. TS 7909
DC loads product on screen after multiple attempts	Occasional problem with the product code. TS 7910
Unable to enter a defect, OK button is disabled	After logout and login the same defect can be created. TS 7911
Qty Per Time trigger fires incorrectly	The user configured a Qty Per Time trigger to fire when 3 defects on a minimum sample size of 3 were found within 60 minutes. The user indicates that it misfires every day. TS 7913

Program Fixes from 5.2

Corrected item	What it means
In Layout Manager, controls jump off the screen after they are selected	The new concept of Canvas eliminates the possibility of placing controls off screen. TS 6546
Multiple entries on Defect Data Dump Report - ARS	Entering defects on views with multiple grids would create one defect record for each grid. TS 6408
Cannot assign individual Responsible Area/Cells in Event Service triggers	User was unable to save specific responsible areas/cells; only ALL option was saved. TS 6716
Inaccurate information in Open Defects at Tracking Point (201) report - ARS	Query included defects and repairs beyond the specified date range. TS 6815
ARS Begin and End Dates do not reflect current Date Selection	In ARS, when selecting a Date Selection like "Last Week", the correct dates are being used when filtering the report and the correct dates display at the top of the report but the Begin Date and End Date filters on the right-hand side of the screen did not change to show the correct dates as they currently do in "Classic" Reporting. TS 6636
Cannot navigate by page with custom filters in Classic Reporting	Problems with the Search capability in custom filters were corrected. TS 6724
Program Tracking (400) report ignores the date range selected by user - ARS	Problem in the query related to program_name column. TS 6676
Detail\Detail report does not show the part\location\detail text in the chart	Selecting Concern/Part/Location would show Detail only. TS 6629
Error message on Inspection Removal	An error message appeared when running the Inspection Removal administrative task in Classic Reporting. TS 6646
Unable to resize Copy Unit Keyboard control	The Keyboard Size property had been left out of the list. TS 6891
EventServiceSMTPDevice Service resets Extended Logging value in registry upon startup	The registry key would reset its value after each restart, so it was not possible to use the Debug mode. TS 6720
Recurring Defects not Working on Data Collect	The function that added recurring defects was being called in two places. TS 6788
Cannot enter lowercase format characters on Checklist questions	All text was forced to upper case. TS 6617
Error message when deleting production areas in Admin	Reference to obsolete table was deleted. TS 6810
In Admin, entering character '{' in part, option code, pocket repair, arrow, station and reference description field	The character was not allowed due to the manipulation of the table updates. TS 6887, 6950, 6951, 6952, 6953, 6954

causes error message	
Reset button on checklist gives duplicate multiple choose entries	The control would clean up the current answers, but would not delete the previous one. TS 6824
Error message when adding/removing recipients to trigger	User would be unable to edit the recipients list. TS 6845
Error message when deleting validation Messages	User would be unable to delete validation messages. TS 6811
Checklist validation is disabled when adding custom error message	Checkbox should not be updated after adding the message. TS 6743
Cannot delete SMTP Output in Event Service	Error message would prevent deletion. TS 6755
Wrong purpose of spreadsheet control property	A property designed for setting the highlighted color of the selected row on a spreadsheet control had no effect on it. It was corrected, so now the property is functional. TS 6890
Concerns auto control does not refresh when selecting different parts in MDE mode	On Multiple Defect Entry, switching from part to part would not update the Concerns control. TS 6904
Auditor Ranks and Responsible Areas menu items are not active in Admin	After using these options and closing their window, their option in the menu would still be disabled as if the windows were still open. TS 6915
Extra columns exporting to CSV in ARS	Additional columns would be created when exporting ARS reports. TS 6741
Copyrights	Copyrights are now extended until 2009. TS 6689
Error message on update script	Script to update from 4.1.4 to 4.1.5 had two errors. TS 6820
Auto controls not showing on Goto Next Batch screen	Controls would not appear due to a refresh issue. TS 6916
Unable to print travel ticket	The error 'CBaseTicket::Print(): Failed to create DC!' would appear when trying to print a travel ticket. TS 6622
Column headers on travel ticket do not display proper vocabulary in German	Languages other than English (US) were affected. TS 7000
ADO Error when adding a Serial Port Handler with a baud rate of 38400	Removed the 38400 baud setting as it was not supported by the check constraint. TS 6966
ADO error editing a Plant Metrics Subgroup	Attempting to edit any existing Plant Metrics Subgroups from the Admin application resulted in an ADO Provider Error message. TS 6967
ADO error adding a Audit Report Target	Attempting to add/edit any Audit Report Target from the Admin application resulted in an ADO Provider Error message. TS 6968
ADO error deleting a Reference Categories	Attempting to delete any existing Reference categories from the Admin application resulted in an ADO Provider Error message. TS 6969
Dynamic Lookup table	Issue trying to create a dynamic lookup and one of the

constraint	substrings has a start position greater than 50 and they are receiving an error. Modified dialog to use dropdown's (combo boxes) to limit input to appropriate values. TS 6985
Error when deleting script from event service	Corrected issue and now presents warning message when scripts currently have associations. TS 6812
Concern Ranking ignoring CUI filter selections	Also affected Details Online/Offline, Concern Grid, Concern Spectrum, Concern Spectrum Video Wall, Repairs by Area/Cell, and Repairs by Category reports. TS 7003
DPU Group or DPU Resp Group target won't allow duplicate date	Issue corrected to allow duplicate dates. TS 6764
AND operator does not work with Unit Lookup Test for inclusion	The SQL query had to be modified. TS 6566.
Outdated information on README.TXT	Updated system requirements and company contact information. TS 6777
Error message "Cannot start service from the command line or debugger" during installation	Corrected installation routine. TS 7087
Long delay in Licensing Service	Corrected the Licensing timing at startup. TS 6781
Error message when opening view in Admin	Problem appeared when no image was associated to view. TS 6958
ADO error deleting Audit station	Delete statement was not checking one table. TS 7101
ARS - Login fields off center when using IE6	Corrected placement of login fields. TS 7099

Program Fixes from 4.1

Corrected item	What it means
Stored procedure Get_Day_Shift	When using the stored procedure insert_tracking_point_pass, the actual date was not being used in calls to the get_day_and_shift procedure. This issue has been fixed. CQ6771
Edit Control property in login layout	The edit control property of a login layout used to allow an unlimited number of characters to be used, both numeric and alphanumeric. This has been changed to only allow specific mask characters. CQ 6772
Duplicate default users available in Station settings property tab	In Admin, duplicate default users were being listed in the dropdown field for the Station settings Property tab. This issue has been fixed so that duplicates are no longer displayed. CQ 6792
Multiple Defect screen in Data Collect	The Multiple Defect screen in Data Collect was overlapping other controls has been fixed. CQ 6797
Product/Rank filter in Reporting	Inspect Reporting, using the Defects Reports module and Product/Rank as a filter displays number of units inspected, instead of the number of defects that occur by rank. This issue has been fixed. CQ 6750
Reporting module trigger events	An error occurred in Inspect Reporting when trying to delete a trigger has been fixed. CQ 6749
Admin deleting a Station	An issue causing ADO Provider errors to occur when a user tried to delete a station in Admin has been fixed. CQ 6764
Reporting login screen	In Inspect Reporting, the login screen was changed to hide the Database dropdown list if only one entry exists in that field. CQ 6834
Reporting for Concerns and Parts filter	In Inspect Reporting, users can now select 'ALL' for concerns and parts filters when using the Control Charts. CQ 6814
Admin using circles to add components to view	Adding a component to a view in Admin using circles caused incomplete or partially displayed component titles. Also, deleting such a component left the title in place but the circle appeared transparent. These issues have been fixed. CQ6777
Overview screen, 'Find View' button	In Data Collect, when the Overview screen has been configured for the "find view" button, the control only finds the views at the top level instead of also finding views nested within a view category. This issue has been fixed. CQ6835
Defect Screen, cell did not get auto-selected after being configured in Station settings.	In Data Collect, when the concern was selected in the Defect Screen, the cell did not get auto-selected. The OK button was not enabled until the user selected the cell one more time. This issue has been fixed. CQ6838
Reporting, filter for Top X Part/Location/Concern	In Reporting, Trend reports configured to use the filter for Top X Part/Location/Concern would display as Top X Concern instead. This issue has been fixed. CQ6921

Reporting, criteria for Defect Correction	In Reporting, an issue existed when using the criteria for the Defect Correction feature. When Responsible Area, Cell and Recording Station were the only filters selected, you would receive a warning message which states 'You must check the items you wish to change,' implying the user did not select any filters. This issue has been fixed. CQ6936
Reporting, incorrect Product Date displayed	An issue where the incorrect Production Date was being displayed for data collected has been fixed. CQ6904
Event Services, Event Monitor freezes	In Inspect Event Services, there was an issue that could occur involving database connections that would lead to the event monitor freezing. The application could not be stopped through the Microsoft Services window – it could only be stopped from Task Manager. This issue has been fixed. CQ6863
All Inspect applications will display name in title bar.	When logging into any Inspect application, the title bar of the login window will now display the name of the application. CQ6952
Data Collect, Defect Screen	When using part categories in Data Collect, the Defect Screen would appear before the user could select a part location. This issue has been fixed. CQ6862
Data Collect, Date Control	An issue with the Date Control feature displaying incorrectly when using the Defect screen in Data Collect has been fixed. CQ6861
Reporting, Concern Ranking	A Reporting issue where the Concern Ranking report using custom criteria would generate errors when changing selections has been fixed. CQ6820
Reporting, Concern Spectrum	When using the Concern Spectrum report, an image-related error led to the inability to load vector images in the PDF report. This issue has been fixed. CQ6740
Layout Manager, Campaign or Manager Recurring Defects layouts	In Layout Manager, opening the Column Info in the Campaign or Manage Recurring Defects layouts led to a white box being incorrectly displayed. This display issue has been fixed. CQ6705
Data Collect, Defect Marked Area feature	In Data Collect, you can see the defect flag in the zoom window but, you can not see the marked area that you created. This issue has been fixed. CQ 6997
Reporting, Event Services creating new output types.	When creating an Output for the first time, you get an error message near the top center of "Failed to parse existing info!" This error message is displayed for all output types, but only when newly created. CQ7025
Data Collect, Recurring Defect screen	In Data Collect, the recurring defect function was not attaching the defect to the components of the new units. Issue has been fixed. CQ 7107
Reporting, Criteria Selection	In Reporting, the custom criteria option to select NULL gives a message that no data was found. Issue has been fixed. CQ 7128
Reporting, Event Services Qty per Time Trigger	Event Services Qty per Time trigger does not return qty per time but defect event for every defect. This issue has been

	fixed. CQ 7159
Admin, deleting a View	Admin - ADO Provider error when deleting new view with components or existing view using any format. This issue has been fixed. CQ 7203
Data Collect, repair screen using repair time control	Data Collect, Repair screen with actual repair time control gives unexpected value when repair type is selected. This issue has been fixed. CQ 7263

Program Fixes from 4.0

- All changes from v3.2 service packs and hot fixes have been incorporated.
- The scale values on C charts were changed. The report now includes the number of defects.
- Several spelling/grammar and screen formatting issues have been corrected.