



AIAG CTS Software – User Guide

Introduction

The purpose of this document is to provide an overview of how the AIAG CTS software works, including the main menu and admin options.

General Information

Any field marked in the system with an * indicates a required field.

Supported Browsers

AIAG's CTS software is a 100% online application compatible with supported browsers running on PC and Mac operating systems.

- **Browser options for Windows:** Chrome (recommended for best performance), Firefox, Microsoft Edge
- **Browser options for Mac:** Chrome, Firefox

Technical Support

If you have any additional questions or require further assistance, please [contact us](#). Our team is available from 8:00am to 5:00pm US Eastern Time (GMT-4).

By Phone

1. Sales and billing related questions: + 1 (248) 784-1888 / +1 (888) 225-5077
2. Technical Support: + 1 (226) 777-0144 / +1 (888) 508-5335

By Email

- Sales and billing related questions: ctsinqury@aiag.org
- Technical Support: support@aiagcts.org



AIAG CTS Software – User Guide

Contents

- Introduction 1
- General Information 1
 - Supported Browsers..... 1
 - Technical Support 1
- Home / Dashboard..... 4
- Admin..... 5
 - Manage User Settings 5
 - Company 5
 - Add and Manage Locations..... 5
 - Add and Manage Users 6
 - Add and Manage Companies (Customer / Supplier Records) 6
 - Account Information 7
 - Parts / Projects / Gage Studies 7
 - Form Lookups – Reusable Library 8
 - Form Lookups – CTS View & DFMEA..... 8
 - Template Editor and Action Priority (AP) Ratings..... 9
 - Editing a Custom Template 10
 - Edit Column Properties 11
 - Action Priority Editor..... 11
- Parts 12
 - Create New Part Record 12
 - Overview of Part Records 12
 - Primary Navigation 12
 - Record Details 12
 - Add New Part Revision..... 15
 - Copy Part Record 15
- Projects 16
 - Create New Project Record..... 16
 - Overview of Project Records..... 17
 - Primary Navigation 17



AIAG CTS Software – User Guide

Record Details	18
Copy an Existing Project.....	20
Tasks.....	20
Primary Navigation	20
Add Tasks to a Project / Assign Tasks	20
Task List View	21
Manage Tasks / Sub-Tasks and Attachments.....	21
Forms	24
Primary Navigation	24
Managing Form Records	26
Forms History	30
Alerts	30
Product and Process Family Libraries	31
Process Flow Visualization	32
Meetings	33
Team Members.....	33
History.....	34
Gage Studies	35
Create New Gage Study Record	35
Overview of Gage Study Records.....	35
Primary Navigation	35
Record Details	36
Actions	37
Reports.....	38
Attachments.....	38



AIAG CTS Software – User Guide

Home / Dashboard



1. **Home and Core Tools:** Return to your dashboard at any point throughout the system. This is a high-level view, allowing you to see the activity of your company and what you need to work on.
2. **Reports:** Generate a summary and detail reports for parts, projects and gage studies. NOTE: *You may also generate reports on most screens in the system by clicking the print icon.*
3. **Parts:** Manage part records involved in your APQP and PPAP projects, including details by part number, name and rev level.
4. **Projects:** Manage your APQP and PPAP projects. Ability to manage multiple projects for the same part record at different part revisions. Track and associate projects with a specific customer, supplier or internal location.
5. **Gage Studies:** Manage library of reusable gage studies. Gage study records can be simply linked via project tasks. You can either upload studies generated outside of CTS as an attachment or directly enter gage study data to generate and view results reports for supported study types Variable (TV/Tol), ANOVA and Attribute.
6. **Actions:** A consolidated list allows you to see and navigate through the tasks assigned to you, plus all parts, projects and gage study records that you have access to on a single screen.
7. **Search:** Site-wide search of part, project and gage study records, including attachment records.



AIAG CTS Software – User Guide

Admin

The Admin section has several sections, including User Settings, My Company, Lookup Lists, Templates, Usage Reports and more.



Admin: Click the wrench to navigate to the Admin section of the system.

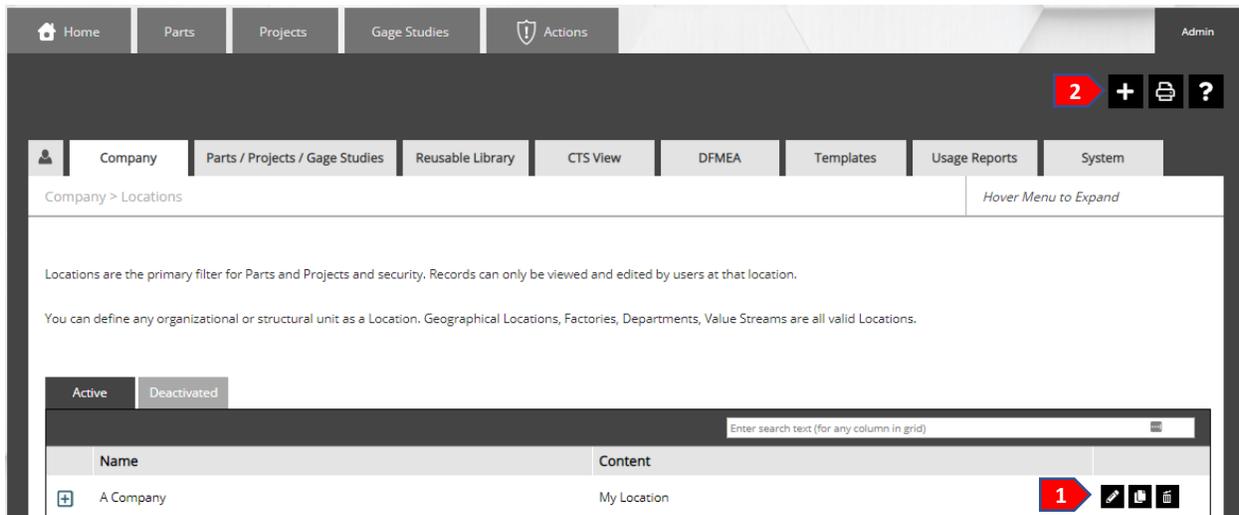
Manage User Settings

In the Admin section, click the “User Settings” icon or select the menu option. You can edit general user information and upload a photo.



Company

Add and Manage Locations



Manage Locations: Locations are used for filtering data across multiple plants, sites or value streams. Account security (permissions) is based on the Locations assigned to users. If a user is assigned to a location, that user has complete access to edit any Part, Project and/or Gage Study record tagged to that location. Each user can be assigned to 1 or more locations.

1. The “New Location” entry is created by default with your new account setup. If you only have a single location, simply edit the “New Location” entry and rename for your location.



AIAG CTS Software – User Guide

2. You may add new records one by one by clicking “Add New” or multiple records via the import feature.

Add and Manage Users

The system is controlled by concurrent user licenses, so you may add as many users as you want. The System Administrator is pre-loaded based on what name / email is associated with the order with AIAG. You can have multiple System Administrators. The other level of user access is “standard” user.

- Once a new user is created in CTS, the user will receive an email with instructions on how to create their account.
- Remember to assign a user to 1 or more locations. This determines what records a user will see and not see.
- Every user is set to Admin or Standard access level. Standard users are not provided access to the Admin section of the system.

Add and Manage Companies (Customer / Supplier Records)

Add and centrally manage customer and supplier records. This information is used for tracking who parts are bought from and sold to. Projects are then associated with a customer or supplier added to a part record.

Active	Deactivated			
Enter search text (for any column in grid)				
Display	Division	Plant	Organization Code	Website
+ ABC Company	Ignition	12	IS21810	[edit] [delete] [refresh]
+ DEF Limited	Tech Center	1	XY82430	[edit] [delete] [refresh]

1. **Manage Customer and Supplier Records:** Navigate to company records interface.
2. **Add New Records:** You may add new records one by one by clicking “Add New” or multiple records via the import feature.



AIAG CTS Software – User Guide

Account Information

Manage Account Info: Under the same Company menu, you will find a link for Account Information where you can add a company logo and edit primary company information to include address, city, state, zip, country and phone.

Parts / Projects / Gage Studies

This section features a variety of Admin pages related to Parts, Projects and Gage Studies entry fields, as well as a section for importing part records.

- **Import Part Records:** Allows you to add multiple Part records at once, making it easier to transfer your existing Part records to CTS.
- **Product Family:** Dropdown menu available on the Part Detail record page.
- **Project Types:** Preloaded with default values for project types (APQP/PPAP) with the option to add new types.
- **Project Header – Confidentiality Level:** Preloaded with default values for confidentiality level with the option to add new values. This information is used in PFMEA / DFMEA headers.
- **Product/Process Classification Types:** Preloaded with default values for characteristic types with the option to add new types according to internal and external (customer) requirements.



AIAG CTS Software – User Guide

- **Operation Types:** Preloaded with default values for operation types with the option to add new types and associate a symbol with each custom value. Values can then be selected at the Part (“Operations”) and Project > Forms record level.
- **Process Work Element (4M Types):** Preloaded with default values with the option to add new values. Values can then be selected at the Part (“Operations”) and Project > Forms record level.
- **Gage Study Types and Gage Types:** Both fields are dropdown fields available on the Gage Study Detail record page.

Form Lookups – Reusable Library

The ability to edit and manage master lookup lists is a feature only available to Admin level users. The Reusable Library is a library of product characteristics, process characteristics and operation records. Library records can be retrieved and added directly to the applicable Forms for any Project. Alternatively, this information may also be entered directly at the Part record level.

Form Lookups - Reusable Library > Product Characteristics Hover Menu to Expand

Reusable Library: Master EDIT LIBRARY FORM DATA FOR ALL FAMILIES

Product Characteristics | Process Characteristics | Operations

Product characteristics are physical features or properties of an assembly or component part usually described on the drawing that can be measured when the process is completed.

Active | Deactivated

Enter search text (for any column in grid)

Number / ID	Characteristic	Specification / Tolerance	Class
-------------	----------------	---------------------------	-------

Form Lookups – CTS View & DFMEA

Centralized lookup record management for Forms data entry. You have the option to add data to lookup lists before creating your first part and project records, or you can begin using CTS and add data over time.

Form Lookups - CTS View > Control Methods Hover Menu to Expand

Description of how the operation will be controlled When selecting the method of control, focus on:

- process control rather than product control
- prevention rather than detection
- targeting nominal rather than specification limits

Active | Deactivated

Enter search text (for any column in grid)

Display



AIAG CTS Software – User Guide

Template Editor and Action Priority (AP) Ratings

Create custom templates by copying existing templates and adding or hiding columns, you can also update settings for Action Priority ratings.

Admin - CTS Templates Hover Menu to Expand

Below are the available templates for CTS View and DFMEA. If you want to make any alterations to these templates (add new columns, hide columns, define on which forms a column appear) or change Action Priority (AP) Ratings (AIAG & VDA Only), simply copy the template you want to change. This will create and add a new version to your organizations account.

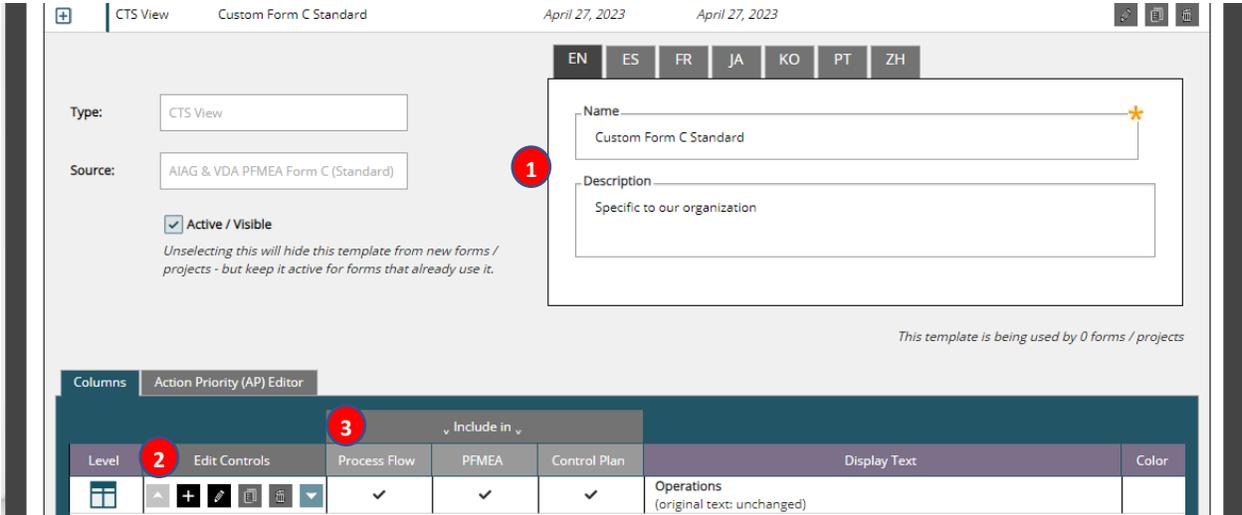
Active Deactivated

Enter search text (for any column in grid)

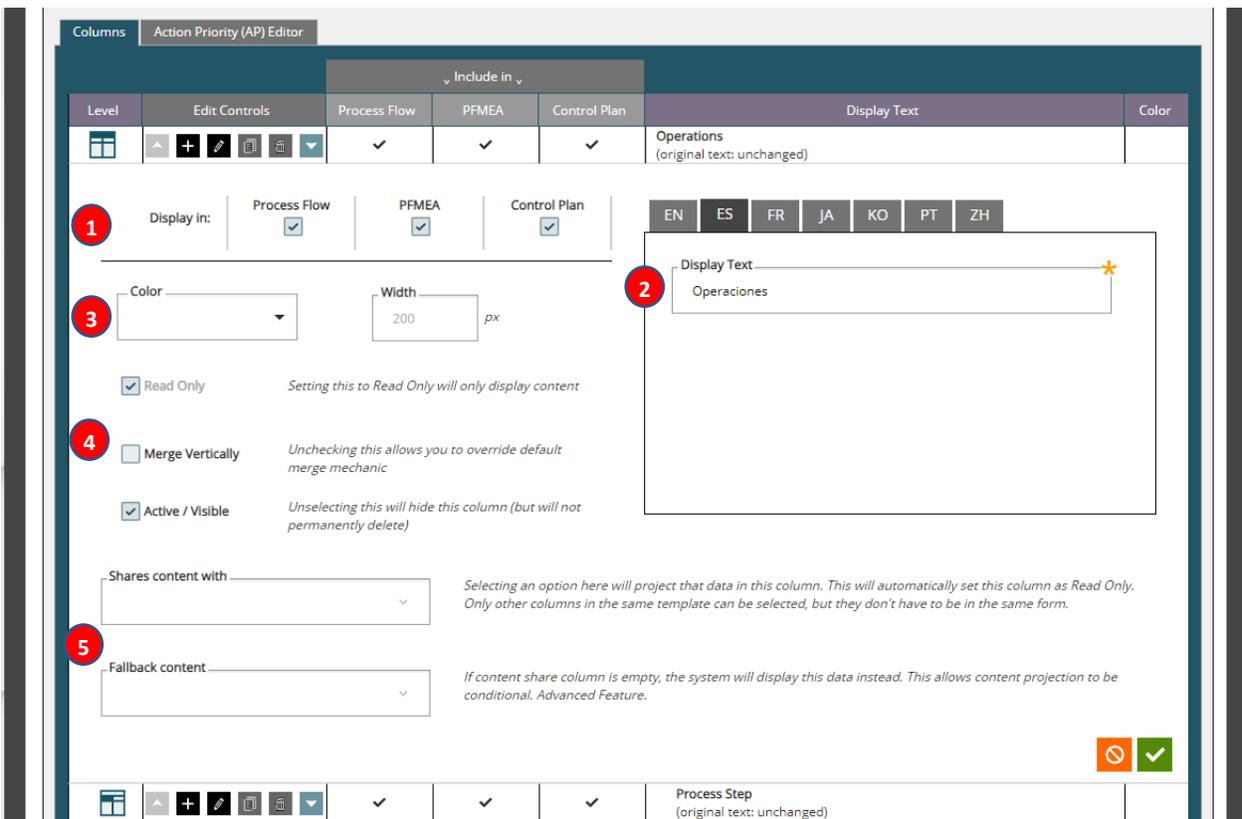
Expand Row	Type	Name	Created	Last Updated	Notes	Delete Row
+	DFMEA	AIAG & VDA DFMEA Form A (Grouped)	September 12, 2019	September 12, 2019	Default template (not editable)	🗑️
+	DFMEA	AIAG & VDA DFMEA Form A (Standard)	September 12, 2019	September 12, 2019	Default template (not editable)	🗑️
+	CTS View	AIAG & VDA PFMEA Form C (Grouped)	September 12, 2019	September 12, 2019	Default template (not editable)	🗑️
+	CTS View	AIAG & VDA PFMEA Form C (Standard)	September 12, 2019	September 12, 2019	Default template (not editable)	🗑️
+	CTS View	AIAG & VDA PFMEA Form E (Alternative)	September 12, 2019	September 12, 2019	Default template (not editable)	🗑️
+	CTS View	AIAG & VDA PFMEA Form G (Alternative)	September 12, 2019	September 12, 2019	Default template (not editable)	🗑️
+	DFMEA	AIAG DFMEA 4th Edition	September 12, 2019	September 12, 2019	Default template (not editable)	🗑️
+	CTS View	AIAG PFMEA 4th Edition	September 12, 2019	September 12, 2019	Default template (not editable)	🗑️
+	CTS View	Custom Form C (Standard)	February 22, 2023	February 22, 2023	Specific to our organization	🗑️

1. **Expand Row:** View columns in the template, see which columns are included on each form.
2. **Template operations:** Copy a default template to create a custom version that can be edited to your specifications.
3. **Edit/Delete:** For your custom templates, you can also update or delete.

Editing a Custom Template



1. **Edit Template properties:** Enter template name and description, in multiple languages if needed.
2. **Edit Controls:** Move a template column, add a custom column, edit, copy or delete a column.
3. **Form Visibility:** View column visibility in each form in the template.





AIAG CTS Software – User Guide

Edit Column Properties

1. **Column Visibility:** Add/remove column from a form.
2. **Header Text:** Edit Display Text for a column.
3. **Color and width:** Set a color for the column header or adjust the width of the column.
4. **Column properties:** Set a column to Read Only to prevent users from updating the data, enable/disable column data merging or hide the column.
5. **Advanced properties:** A custom column can be set up to display content from other columns via selections in “Shares content with” and “Fallback content”.

Action Priority Editor

Columns		Action Priority (AP) Editor					
Effect	S ▾	Prediction of Failure Cause Occurring	O ▾	Ability to Detect	D ▾	Action Priority (AP)	Status
Product or Plant Effect Very High	9-10	Very High	8-10	Low - Very low	7-10	H ▾	Default
				Moderate	5-6	H ▾	Default
				High	2-4	H ▾	Default
				Very High	1	H ▾	Default
	9-10	High	6-7	Low - Very low	7-10	H ▾	Default
				Moderate	5-6	H ▾	Default
				High	2-4	H ▾	Default
				Very High	1	H ▾	Default
9-10				Low - Very low	7-10	H ▾	Default
				Moderate	5-6	H ▾	Default

In the Action Priority Editor tab, you can choose to change the resulting Action Priority ratings for rows in the CTS View based on any given S/O/D conditions.

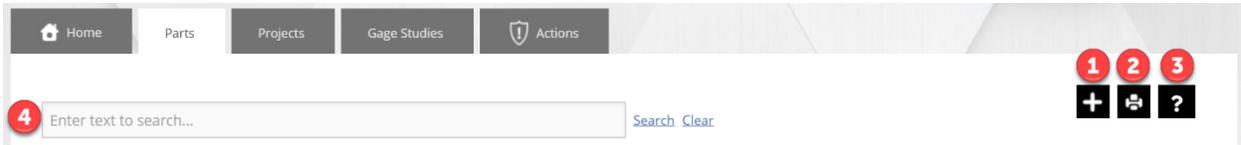


AIAG CTS Software – User Guide

Parts

Part and Project records are central to the CTS Software. Before proceeding to create your first APQP or PPAP Project, you must first create a Part record.

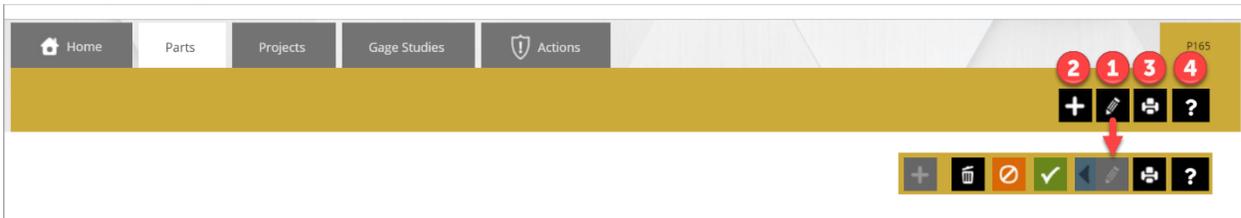
Create New Part Record



1. **Create New Record:** Create new Part record.
2. **Print/Export:** Export list to supported file formats.
3. **Help:** Interactive help tutorial.
4. **Search:** Filter data and highlight search results for records displayed in grid list.

Overview of Part Records

Primary Navigation



1. **Edit:** Edit (and delete) record. When in edit mode, other users will not be able to edit the record. Once you click the green save icon, the record is locked and you will need to click 'edit' again if you want to continue editing.
2. **Add Menu Options:** Provides expanded options, including the ability to create new part revision and copy record (see below).



3. **Print/Export:** Export record to supported file formats.
4. **Help:** Interactive help tutorial.

Record Details

Master Part Details

This section contains Master Part details. The information entered in this section persists across all part revisions for this part record.

AIAG CTS Software – User Guide

The screenshot shows a form on the left with the following fields:

- Part Number: P165
- Part Name: Part Record #1
- Location: My Location (marked with a red circle 1)
- Part Status: Active

On the right, there is a table with tabs for 'Suppliers' and 'Customers'. The 'Customers' tab is active, showing a table with the following data:

Name	Division	Plant	Orga...
ABC Company	Ignition	12	IS21810

A red circle 2 is next to the table, and a '+' icon is in the top right corner of the table area.

1. **Location Assignment:** Account security (permissions) is based on the Locations assigned to users. If you are assigned to a location, you will have complete access (view, edit, delete). Users can be assigned to 1 or more locations.
2. **Supplier / Customer:** List customers you sell this part to and/or suppliers you buy this part from. You can add a new company record directly or select from existing company records. Click the (+) icon to select from existing records or add new records.

Part Revision Details

This section contains Part Revision details. The information entered in this section is associated to a specific part revision and does not automatically persist across all part revisions.

The screenshot shows the 'Part Revision Details' section. At the top left, there is a breadcrumb '1.1' with a trash icon and a red circle 5. The main form has the following fields:

- Part Type: Subsystem
- Part Stage: Pre-Launch
- Primary Product Family: (marked with a red circle 1)
- Secondary Product Families: (marked with a red circle 1)
- Search Tags: (marked with a red circle 1)
- Notes: (marked with a red circle 1)

On the right, there is a 'REV' field with '1.1' (marked with a red circle 1), a 'Status' dropdown with 'Draft' (marked with a red circle 2), and a 'Date' field with '6/30/2020' (marked with a red circle 3). There are radio buttons for 'Buy Part' (selected) and 'Make Part'. Below this is a 'Projects' tab (marked with a red circle 2) and an 'Attachments' tab (marked with a red circle 3). The 'Projects' tab is active and shows 'No data to display'. At the bottom, there is a navigation bar with tabs for 'Product Characteristics' (marked with a red circle 4), 'Process Characteristics', 'Operations', and 'BOM'.

1. **Revision Details:** Manage part revision number/id., status and date.



AIAG CTS Software – User Guide

- Projects:** Create and link new project to this part revision to manage APQP or PPAP project activities. Projects linked with this part revision will display in this section. To quickly add a new project for this part revision, click the (+) icon.
- Attachments:** Upload general attachments for reference.
- Product/Process Characteristics, Operations, and BOM:**
 - Enter and manage characteristics and operation records for this specific part revision.
 - The BOM allows you to relate components, sub-components, sub-assemblies and parts used in a part assembly. You can either create component part records within CTS or simply add as a reference.
- Navigate Between Part Revisions:** Use the tabs to navigate between part revision records.

Product Characteristics, Process Characteristics, and Operations Details

Characteristics and Operations details may be entered and managed directly from the Part record detail page. Entries can be added one by one or uploaded using the import feature. Entries made at the Part record detail level may then be looked up and added through the Forms tab for the associated Project(s).

NOTE: You may also add records via the Reusable Library available in the Admin section (refer to Admin > Add Data to Lookup Library section for further details).

Product Characteristics				Process Characteristics	Operations	BOM
Number/ID	Characteristic	Specification / Tolerance	Class			
				1 +		
				3		
18	Appearance	Free of Blemishes	Major			
18	No Blemishes	Flow Lines	Safety;Special			
19	Mounting Hole Location	Hole "X" Location				
19	Mounting Hole Location	25 + 1mm				
20	Dimension	Gap 3 + 5mm				
21	Perimeter fit	Gap 3 + 5mm				

- Create New Record:** Add new record.
- Import:** Import records.
- Delete:** Remove record entry.

Add New Part Revision

1. **Add Menu Options:** Provides expanded options, including the ability to create new part revision and copy record.
2. **Create New Part Revision:** If selected, you will have the option to select what information you want to duplicate and include in the new part revision. Once a new revision is created, a new tab will appear for the new revision on the Part record detail page.
3. **Master Part Details:** This section includes Master Part details. The information entered persists across all part revisions.

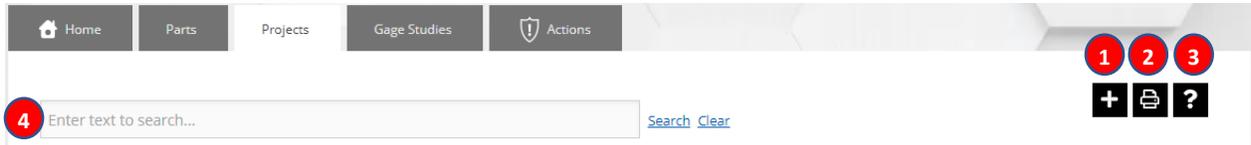
Copy Part Record

1. **Add Menu Options:** Provides expanded options, including the ability to create new part revision and copy record.
2. **Copy Part:** If selected, you will have the option to select what information you want to duplicate and include in the new (copied) part record.

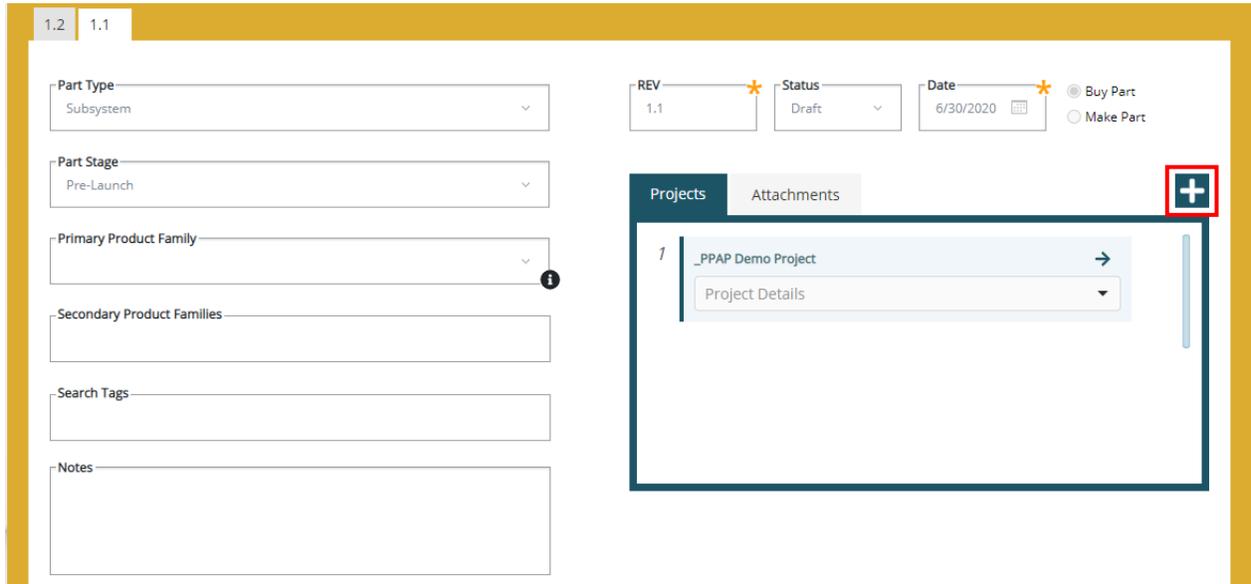
Projects

Part and Project records are central to the CTS Software. Before proceeding to create your first APQP or PPAP Project, you must first create a Part record.

Create New Project Record



1. **Create New Record:** Create new Project record.
2. **Print/Export:** Export list to supported file formats.
3. **Help:** Interactive help tutorial.
4. **Search:** Filter data and highlight search results for records displayed in grid list.



NOTE: A new Project can also be created directly from a Part detail record page. This will automatically associate the newly created project with the specific Part / Part Revision.

Overview of Project Records

Primary Navigation



1. **Edit:** Edit (and delete) record. While in edit mode, other users will not be able to edit the record. Once you click the green save icon, the record is locked and you will need to click edit again if you want to continue editing.
2. **Add Menu Options:** Provides expanded options, including the ability to copy record.
3. **Print/Export:** Export record to supported file formats.
4. **Help:** Interactive help tutorial.

Project Tabs

5. **Details:** Manage general project details.
6. **Tasks:** Create, assign and manage project tasks. Upload attachments to tasks, add external links (URLs), add system linkage to gage studies and download template forms.
7. **Forms:** Create and manage DFMEA, Process Flow, PFMEA and Control Plan forms. You can use a standard template or assign a custom template. Custom templates provide the ability to display the information in user definable formats and are managed in the Admin section.
8. **Meetings:** Create and manage project meeting records.
9. **Team Members:** You may add and track project team members from here. Once added, team members will appear on the details page.
10. **History:** Keep track of project change history/log with details on what changed and who made the change.

Record Details

1. Account security (permissions) is based on the Locations assigned to users. If you are assigned to a location, you have complete access (view, edit, delete). Users can be assigned to 1 or more locations.
2. Every project must be associated with a part record. You can manage multiple projects for the same part record at different part revisions. To add a secondary part number (customer or supplier part number), click the icon.
3. Track and associate projects with a specific customer, supplier or internal location. Available selection options based on customer and supplier records added to part record.
4. Add a secondary part number (customer or supplier part number).
5. Upload general attachments for reference or inclusion in Publish Project export.
6. The **Releases** tab lists all the project release files that can be created when saving changes on the Forms page.



AIAG CTS Software – User Guide

- The **Published Projects** tab lists all the project publish files. These files contain a detailed Project Report plus any task attachments indicated as a submission item. Attachments and links are included in the zip export.

Publish Project Example

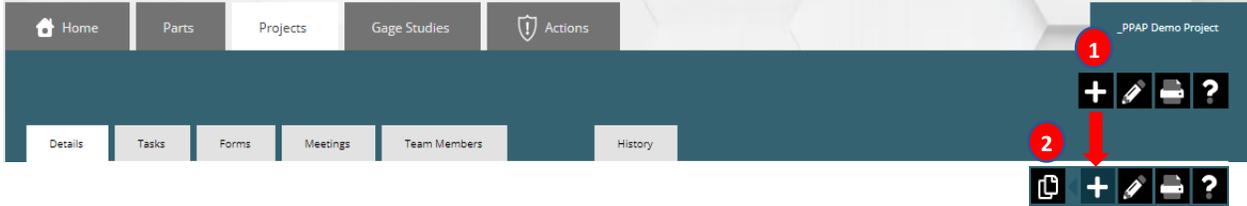
Name	Submission Item
Example Demo Project - Seat Assembly	No
PPAP REQUIREMENTS	No
Customer Engineering Approval	No
Process Flow Diagram	Yes
Process Failure Modes and Effects Analysis (PFMEA)	Yes
Control Plan	Yes
Measurement System Analysis (MSA)	Yes
Dimensional Results	Yes
Material / Performance Test Results	Yes
Initial Process Studies	Yes
Qualified Laboratory Documentation	No
Appearance Approval Report (AAR)	No
Sample Production Parts	No
Master Sample	No
Checking Aids	No
Customer-Specific Requirements	Yes
Part Submission Warrant (PSW)	Yes
ProjectSummaryReport_1554389523.pdf	No
customer_sow-requirements_2019.docx	No

Buttons:

Name	Type	Compressed size	Password pr...	Size	Ratio	Date modified
Task - PPAP REQUIREMENTS	File folder					
ProjectSummaryReport - Example Demo Project - Seat Assembly	Adobe Acrobat Document	93 KB	No	97 KB	5%	5/30/2019 5:19 AM

Name	Type	Compressed size	Password pr...	Size	Ratio	Date modified
ControlPlan_4_17_2019	Adobe Acrobat Document	98 KB	No	103 KB	5%	5/30/2019 5:19 AM
DimensionalTestResults	Microsoft Excel Worksheet	10 KB	No	14 KB	32%	5/30/2019 5:19 AM
FMEA_4_17_2019	Adobe Acrobat Document	98 KB	No	103 KB	6%	5/30/2019 5:19 AM
GageStudyReport_Demo Gage Study(...)	Adobe Acrobat Document	85 KB	No	89 KB	5%	5/30/2019 5:19 AM
MaterialTestResults	Microsoft Excel Worksheet	10 KB	No	14 KB	31%	5/30/2019 5:19 AM
MSA Report	Adobe Acrobat Document	200 KB	No	204 KB	3%	5/30/2019 5:19 AM
PartSubmissionWarrant	Microsoft Excel Worksheet	23 KB	No	36 KB	37%	5/30/2019 5:19 AM
ProcessFlow_4_17_2019	Adobe Acrobat Document	92 KB	No	97 KB	5%	5/30/2019 5:19 AM

Copy an Existing Project



1. **Add Menu Options:** Provides expanded options, ability to copy the project with all related records.
2. **Copy Project:** If selected, you will have the option to select what information you want to duplicate and include in the new (copied) project record.

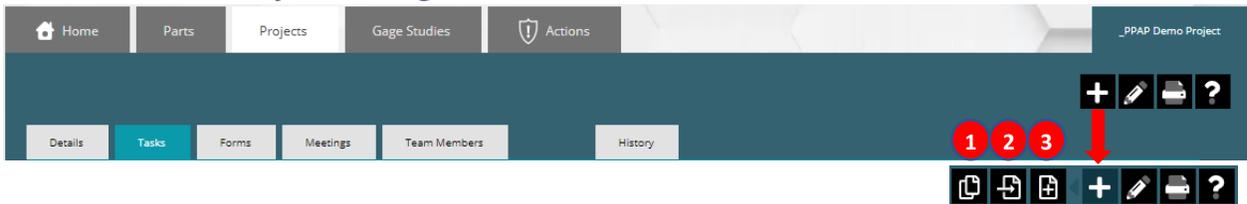
Tasks

Primary Navigation



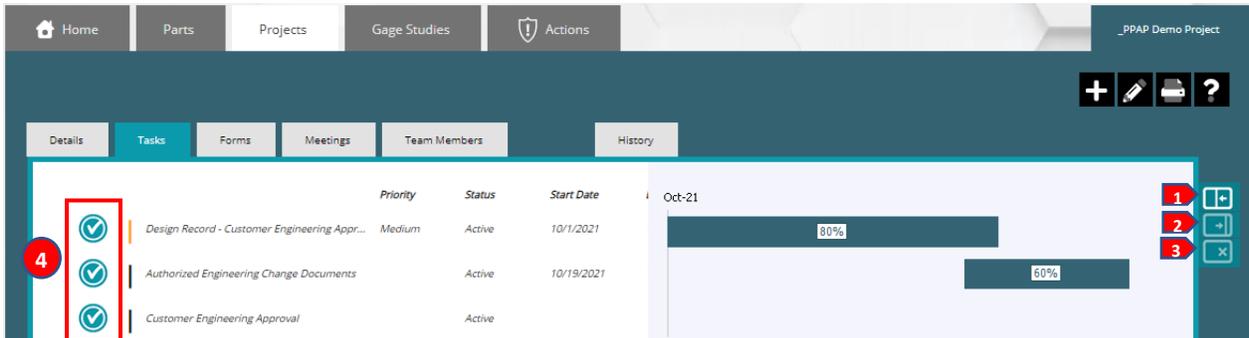
1. **Task Edit:** Enable quick edit allows you to batch edit tasks and sub-task details in list view.
2. **Add Menu Options:** Provides expanded options, including the ability to add a new primary task, add tasks from template library and copy tasks from existing projects.
3. **Print/Export:** Export record to supported file formats.
4. **Help:** Interactive help tutorial.

Add Tasks to a Project / Assign Tasks



1. **Add Task(s) – Copy from Project:** Copy tasks from previous project. Select the desired project to show a list of tasks and select the task(s) you would like to copy.
2. **Add Task(s) – Task Template:** Add tasks from the Task Template Library (primary tasks and sub-tasks). The default task templates include APQP Checklists, Bulk Material Requirements Checklist, PPAP Requirements and more.
 - NOTE: You can also create custom task templates in addition to the default templates. To create custom task templates, navigate to Admin > Task Template Library section.
3. **Add Task(s) – Single Task:** Add a single blank task.

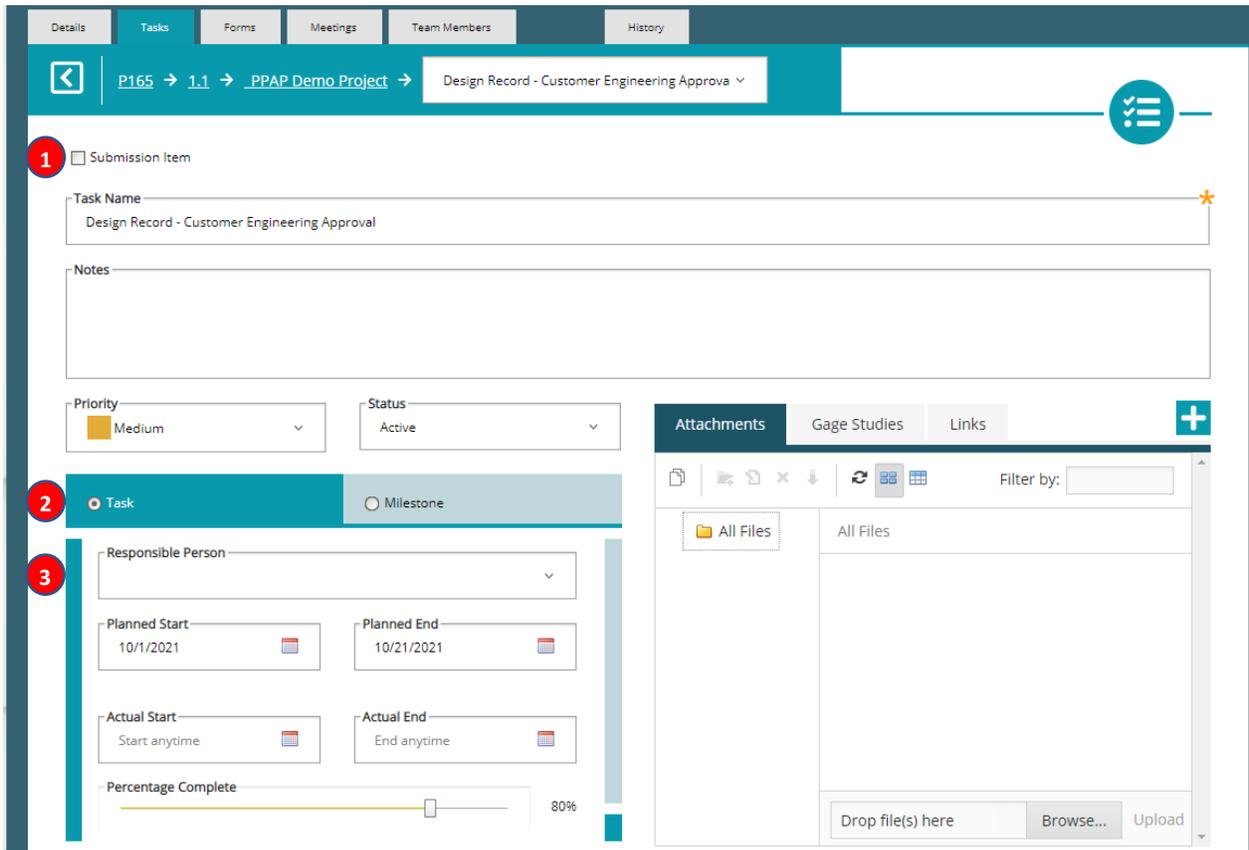
Task List View



1. Show Gantt Chart
2. Show Collapsed Gantt Chart
3. Hide Gantt Chart
4. Open Detail Task View

Manage Tasks / Sub-Tasks and Attachments

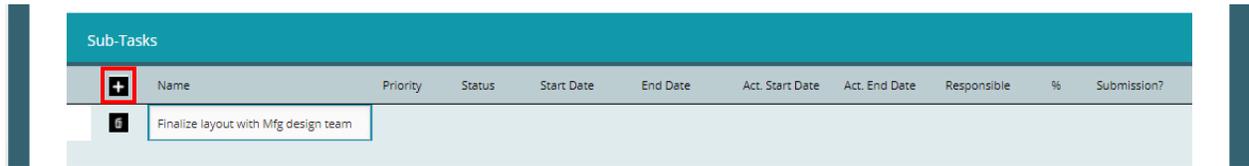
Task Detail



AIAG CTS Software – User Guide

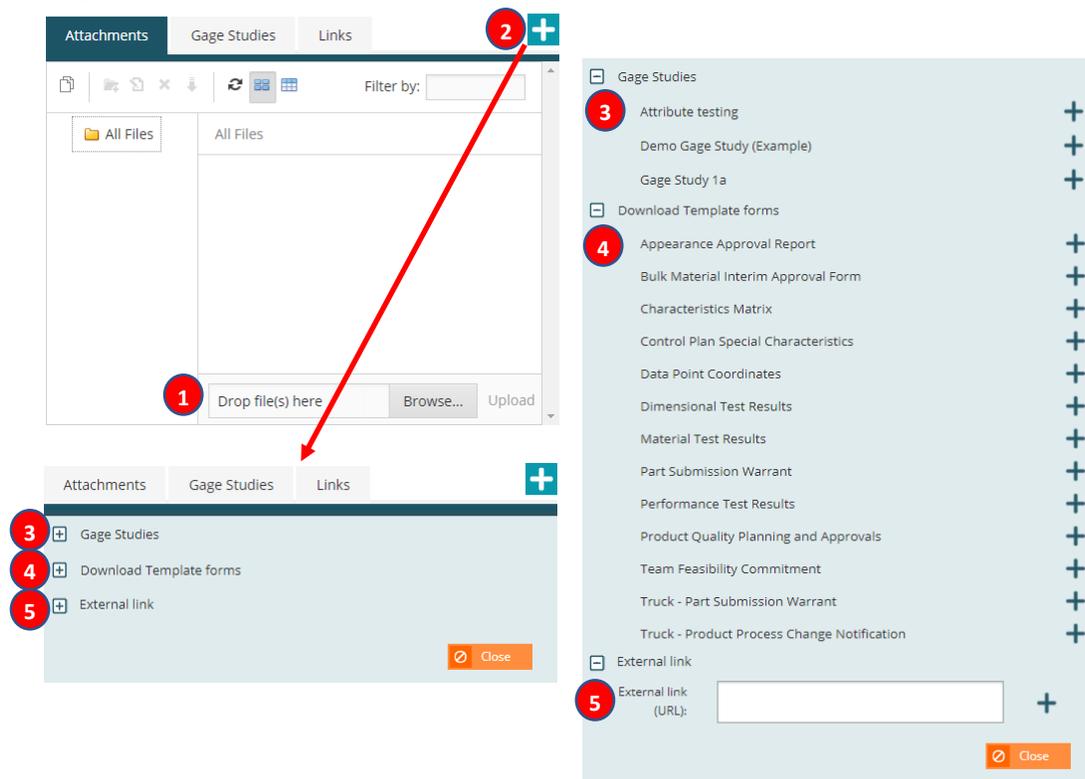
1. **Submission Item:** Indicate whether a task / sub-task is a submission item. Submission items are automatically marked for inclusion in file export initiated by clicking “Publish Project” on the Project > Details screen.
2. **Task Type:** Indicate whether this is a milestone or standard task type.
3. **Responsible Person:** Assign a task to another CTS user. The dropdown includes all active CTS users. Upon assignment and saving the task record, the assigned user will receive an email notification from CTS with a link to access this specific task record.

Add Sub-Tasks



To add a sub-task, click the (+) icon, enter basic details and then save record.

Manage Attachments



1. **Upload Standard Attachment:** To upload an external attachment, drag and drop files or click ‘browse’ to select files from your local network folder. NOTE: A common use case for standard attachments is to attach files DFMEA, Process Flow, PFMEA, and Control Plan files generated and exported via the Project > Forms tab.



AIAG CTS Software – User Guide

2. **System Linkage Attachments:** The system linkage attachment feature is comprised of three types of attachments (refer to 3-5 below for further information).
3. **System Linkage Attachment – Gage Studies:** Link project task record to an existing Gage Study record. If the associated task is included in the “Publish Project” export, the system will retrieve the Gage Study record details and attachments and include in the export package.
4. **System Linkage Attachment – Template Forms:** Many of the legacy spreadsheet forms included on the AIAG Excel CD can be added to task records. Once added, the system will populate sections of each form that exists in CTS for the associated Project / Part record.
5. **System Linkage Attachment – External Link:** Include external link to URL. The provided URL will be included in the “Publish Project” export report.

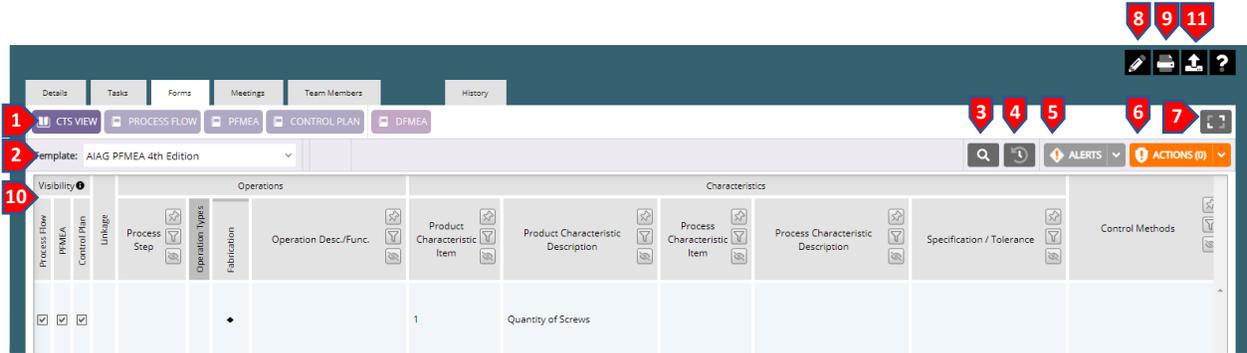


AIAG CTS Software – User Guide

Forms

Create and manage your Process Flow, PFMEA, Control Plan and DFMEA records.

Primary Navigation



1. **Form Tabs:** The CTS View is an integrated interface that allows you to simultaneously prepare the Process Flow, PFMEA and Control Plan forms. NOTE: DFMEA is not part of the CTS View and is managed separately. Click the CTS View tab to access the integrated view. You can also click each individual form tab to view and edit form-specific information.
2. **Template Manager:** Allows you to add new columns, hide columns and define whether a column should be included in the Process Flow, PFMEA and/or Control Plan. You may select the standard CTS View Template or a custom CTS View Template. You can also create and manage templates through the Admin section.
3. **Search:** The search panel allows you to filter data and highlight search results for records displayed among the grid list.
4. **History:** See all the changes made to the selected form and optionally export a list of those changes to a PDF. *See below for more details.*
5. **Alerts:** Any alerts of changes within the system that may affect your existing form data are shown here. *See below for more details.*
6. **Actions:** Bring the right side of the FMEA to life with the Actions Tracker. Use the actions panel to keep track of your PFMEA and DFMEA improvement actions. Simply click on an action to navigate directly to that row.
7. **Full Screen Mode:** Maximize to Full Screen Mode for CTS View, Process Flow, DFMEA, PFMEA and Control Plan.
8. **Edit Mode:** Click to enable edit mode. When in edit mode, other users will not be able to edit the record. To save your changes and return to view only mode, click the green save icon in the top menu. To save your changes but remain in edit mode, click the green save icon below the forms grid.
9. **Print/Export:** Export records to supported file formats. You can then attach the export file to a task to include within publish project submission package.
10. **Row Visibility:** The row visibility feature in CTS View provides you with complete control; you can hide or show an operation in your Process Flow, PFMEA and Control Plan.

AIAG CTS Software – User Guide

11. **Import:** Bring forms from your organization into the system by importing them from an Excel sheet using our import function. Existing operations and characteristics will automatically be linked to the form and any new ones will be added to the associated part.

You have 3 options for editing and importing data for all lookups:

1. Regular Grid Batch Editing: enter data quickly and with proper validation.
2. Copy/Paste data from Excel - simply select the cells you want to import and paste them into the indicated area.
3. Import a comma-separated file (optionally - use the provided template).

Type: CTSView

Template: AIAG & VDA PFMEA Form C (Standard)

BATCH EDIT COPY/PASTE FROM FILE

Operations				
Process Step	Operation Type	Operation Desc./Func.	Product Characteristic Item	Product Characteristic Description
No data to display				

- a. In BATCH EDIT mode, you can view and manually edit data uploaded from COPY/PASTE and FROM FILE before importing into the system.

BATCH EDIT COPY/PASTE FROM FILE

To copy/paste your data (any number or records) - simply select the range in Excel, copy - and paste it into the area to the right. That will automatically populate the grid - and allow you to designate which column contains which property. The order of the columns is:

(*) Mandatory columns [Copy columns template.](#)

Paste text to import here (from Excel)...

- b. COPY/PASTE will allow you to copy data in an Excel sheet and paste it into the area provided. The import utility will then parse the information into the columns in the selected form.

BATCH EDIT COPY/PASTE FROM FILE

The order of the columns is:

(*) Mandatory columns [Copy columns template.](#)

Drop file(s) here Browse...

- c. When you import from a file, simply drag and drop the file or use the Browse button to locate the file.

Note: After the import is completed, please select the applicable row visibility checkboxes (i.e. Process Flow, PFMEA, and/or Control Plan) to ensure the imported data appears in the desired forms.

Managing Form Records

Add New, Edit, Copy, Delete and Move Records

You can manage records directly from the CTS View tab and the individual form view (Process Flow, PFMEA, Control Plan and DFMEA).

The screenshot shows the 'AIAG & VDA PFMEA Form C (Standard)' interface. At the top, there are tabs for 'CTS VIEW', 'PROCESS FLOW', 'PFMEA', 'CONTROL PLAN', and 'DFMEA'. Below the tabs is a search bar and 'ALERTS' and 'ACTIONS (0)' buttons. The main area is a table with columns for 'Visibility', 'Process Flow', 'PFMEA', 'Control Plan', 'Linkage', 'Process Step', 'Operation Type', 'Operation Desc./Func.', 'Product Characteristic Item', 'Product Characteristic Description', 'Process Characteristic Item', 'Process Characteristic Description', and 'Specification / Tolerance'. There are four rows of data, each with a red callout number: 1 (Add New Row), 2 (Edit Records), 3 (Copy Row), 4 (Delete Row), and 5 (Move Row Up/Down). A red callout number 6 points to a library icon in the top right of the table area.

Visibility	Process Flow	PFMEA	Control Plan	Linkage	Process Step	Operation Type	Operation Desc./Func.	Product Characteristic Item	Product Characteristic Description	Process Characteristic Item	Process Characteristic Description	Specification / Tolerance
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	20	Fabrication	Attach seat cushion to track using torque gun (air pressure)	1	Quantity of Screws			
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	20	Fabrication	Attach seat cushion to track using torque gun (air pressure)				Torque equip. adjust	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	20	Fabrication	Attach seat cushion to track using torque gun (air pressure)	1	Quantity of Screws			
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	20	Fabrication	Attach seat cushion to track using torque gun (air pressure)	1	Quantity of Screws			

Page 1 of 1 (4 items) | Page size: 100

- Add New Row:** Add new blank row below.
- Edit Records:** To edit a record, simply click anywhere in the grid. To save your changes and return to view only mode, click the green save icon.
- Copy Row:** All data for this row will be copied and added as a new row entry below.
- Delete Row:** Deletes entire row record.
- Move Row Up/Down:** Use the up/down arrows or move icon to change the positioning of a row.
- Product and Process Family Libraries:** Shows a popup that will allow you to add rows to the form from the Reusable Library. *See below for further details.*



AIAG CTS Software – User Guide

Lookup Lists

Multi Control: Allows the user to select from records entered for the Part > Part Revision associated with this Project or via the Reusable Library – Product/Process Characteristics and Operations (managed in the Admin section). NOTE: A user can also add new values directly, however new entries are not automatically added to the Part record or Reusable Library (Admin) record sets.

The screenshot illustrates the 'Multi Control' feature. It shows a table with columns for 'Operations' and 'Characteristics'. A red dashed arrow points from the 'Product Characteristic Item' dropdown in the 'Operations' table to a 'Product Characteristics' lookup window. The lookup window displays a table with the following data:

Number / ID	Characteristic	Specification / Tolerance	Class
101	Hole Position		
102	No Burr (hole region)		

Below the lookup window, there is a navigation bar with tabs for 'Company', 'Parts / Projects / Gage Studies', and 'Reusable Library'. Under the 'Company' tab, there are links for 'Product Characteristics', 'Process Characteristics', and 'Operations'.

Single Control: Allows the user to add new values directly or select from existing values.

The screenshot illustrates the 'Single Control' feature. It shows a table with columns for 'Failure Effects (FE) :: End User', 'Failure Mode (FM) of the Process Step', 'Failure Cause (FC) of the Work Element', 'Current Prevention Control (PC) of FC', and 'Current Detection Controls (DC) of FC or FM'. A red dashed arrow points from the 'Current Prevention Control (PC)' dropdown to a 'Value' dropdown menu with options 1 through 6.



AIAG CTS Software – User Guide

Form Header Data

Header data added to your Process Flow, FMEA and Control Plan will save and persist. When you first export a form, any data that already exists based on the records entered in CTS will auto populate. **NOTE: The view/edit header data functionality is not available in CTS View.**

Template: AIAG & VDA PFMEA Form C (Standard)

Stage	Control Plan Number	Date (Orig.)
Part Number P165	Organization / Plant	Date (Date Rev.)

Pin Columns

The pin columns feature allows a user to temporarily freeze columns to the left side of the grid while freely scrolling through the rest of the form. This feature is similar to the “freeze panes” option available in spreadsheet applications and is available when viewing and editing forms in CTS.

Template: AIAG & VDA PFMEA Form C (Standard)

Linkage	1. Process Item :: System, Subsystem, Part Element or Name of Process	2a. Process Step :: Station Number	2b. Process Step :: Name of Focus Element	3a. Process Work Element :: 4M Type	3b. Process Work Element :: Description	1a. Function of the Process Item :: Your Plant	1b. Function of the Process Item :: Ship to Plant	1c. Function of the Process Item :: End User
---------	---	------------------------------------	---	-------------------------------------	---	--	---	--

Filtering Column Values

The filter feature allows a user to temporarily display only the rows that match specified values in one or more columns, allowing for a targeted search of all Form data by any criteria the user chooses.

Template: AIAG & VDA PFMEA Form C (Standard)

Linkage	1. Process Item :: System, Subsystem, Part Element or Name of Process	2a. Process Step :: Station Number	2b. Process Step :: Name of Focus Element	3a. Process Work Element :: 4M Type	3b. Process Work Element :: Description	1a. Function of the Process Item :: Your Plant	1b. Function of the Process Item :: Ship to Plant	1c. Function of the Process Item :: End User
---------	---	------------------------------------	---	-------------------------------------	---	--	---	--



AIAG CTS Software – User Guide

Hide Columns

The hide column feature allows a user to temporarily hide columns for the purpose of bringing relevant information into view to reference during data entry, reducing the need to scroll back and forth across the form. This feature is also available when viewing and editing forms in CTS.

The screenshot displays the AIAG CTS software interface for a PFMEA form. The top navigation bar includes tabs for CTS VIEW, PROCESS FLOW, PFMEA, CONTROL PLAN, and DFMEA. The main area is divided into two sections: Structure Analysis (Step 2) and Function Analysis (Step 3). The Structure Analysis section contains a table with columns for Process Step Name of Focus Element, Process Work Element (4M Type), and Process Work Element Description. The Function Analysis section contains columns for Function of the Process Item (Ship to Plant, End User), Function of the Process Step, Product Characteristic, and Product Item. A red arrow points to the 'Focus Element' column header. At the bottom, a red box highlights the 'Hidden Columns' section, which lists '1. Process Item :: System, Subsystem, Part Element or Name of Process' and '1a. Function of the Process Item :: Your Plant' as hidden, with an 'Unhide All' button. The page size is set to 100.



AIAG CTS Software – User Guide

Forms History

Change Log - CTS VIEW

- 11/24/2021 (By Test User) @10:46 AM added Process Step 20
- 11/24/2021 (By Test User) @10:46 AM added Process Step 20
- 11/24/2021 (By Test User) @10:46 AM Process Step 20 changed Process Step from "10" to "20" + 3 other changes([view details](#))
- 11/24/2021 (By Test User) @10:46 AM added Process Step 20
- 11/5/2021 (By Test User) @3:17 PM Process Step 10 changed Product Characteristic Description from "Hold position" to "Hold position"
- 11/5/2021 (By Test User) @3:17 PM added Process Step 10

OUTPUT CHANGE LOG

All changes made to the selected form are shown, along with the name of the user that made the change, and the date and time. These changes can then selectively be exported as a report.

Alerts

REVIEW REQUIRED

ACKNOWLEDGED

Part Updated:
Part Record #1, has been updated by testuser@yourcompany.com at the Part Level; the Part Name was altered from "Part Record" to "Part Record #1".
Please update your records accordingly or reselect this Operation from the Lookup dropdown to update the linked cells.

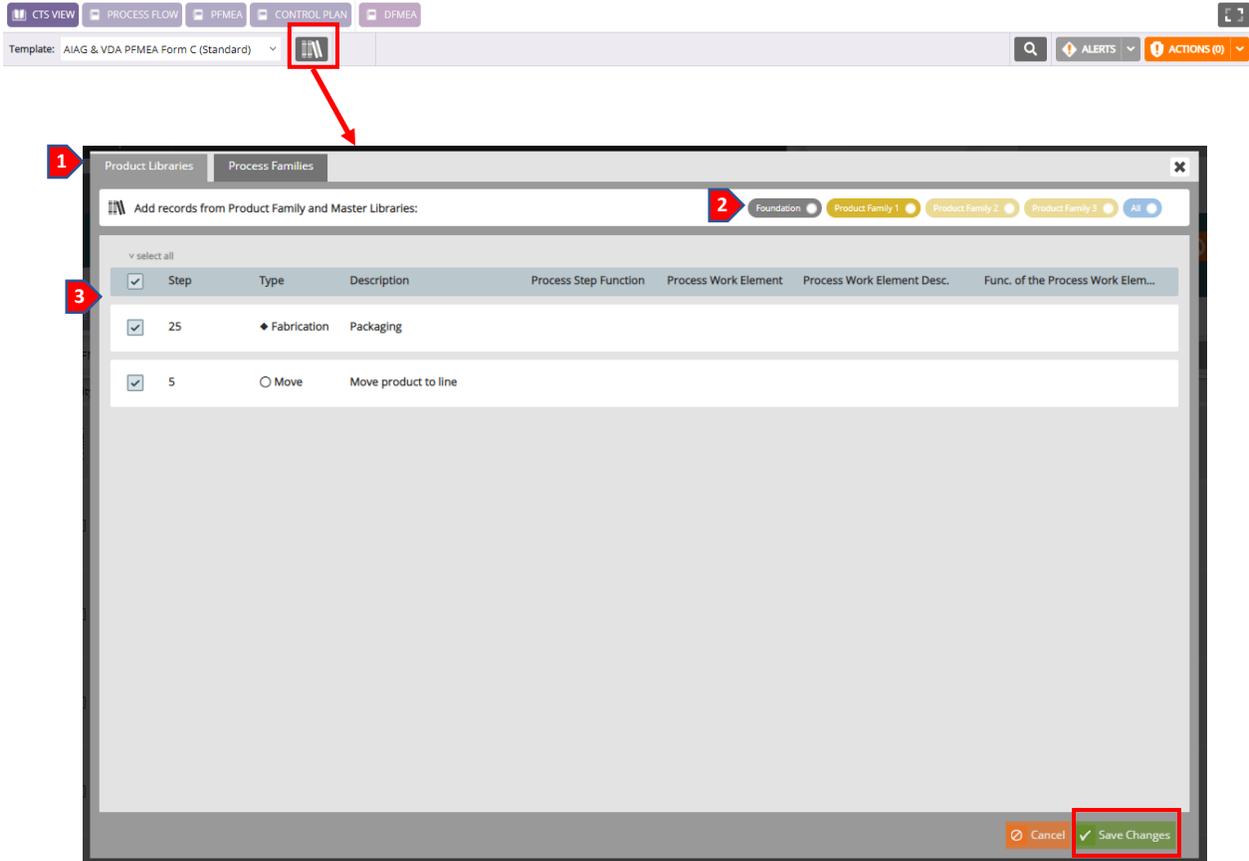
ACKNOWLEDGE

Part Updated:
Part Record #1, has been updated by testuser@yourcompany.com at the Part Level; the Part Number was altered from "P165A" to "P165".
Please update your records accordingly or reselect this Operation from the Lookup dropdown to update the linked cells.

Alerts will let you know if changes that may affect the data in your forms have been made by other users in your account. Along with specific information about the change, there are instructions about your choices to keep your original information or to update it with the latest changes. Once you have reviewed the alert, you can acknowledge it to remove it from your list.

Product and Process Family Libraries

In edit mode on the Forms page, you can select rows from the Reusable Library to add to your forms by clicking the Library icon to launch the popup shown below:



1. **Product Libraries and Process Families tabs:** Choose rows for your form based on the Product Families specified for the part associated with this project or Process Families.
2. **Product Library menu:** Click on the Product Family items to display (or hide) rows for individual families.
3. **Row selection:** All visible rows can be selected using the “select all” checkbox or you can choose individual rows to include or exclude.

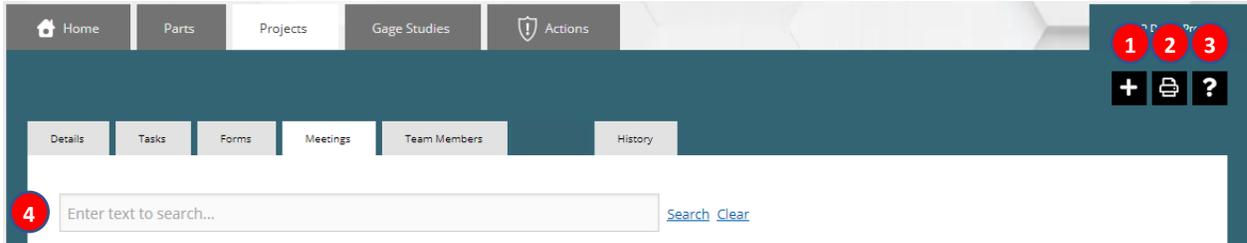
When you have made your selections, simply click the “Save Changes” button and the rows will be added to your form.

Process Flow Visualization

When not in edit mode, the Process Flow template features a diagram under the Operation Types header column that visually displays the flow using symbols and arrow connectors. There are options to display the diagram in either a single column or multiple columns, to hide all columns outside of Operations and to switch to Visual Mode. In this mode, which is print friendly, there is only a diagram displayed with the information from all columns shown next to the process steps.

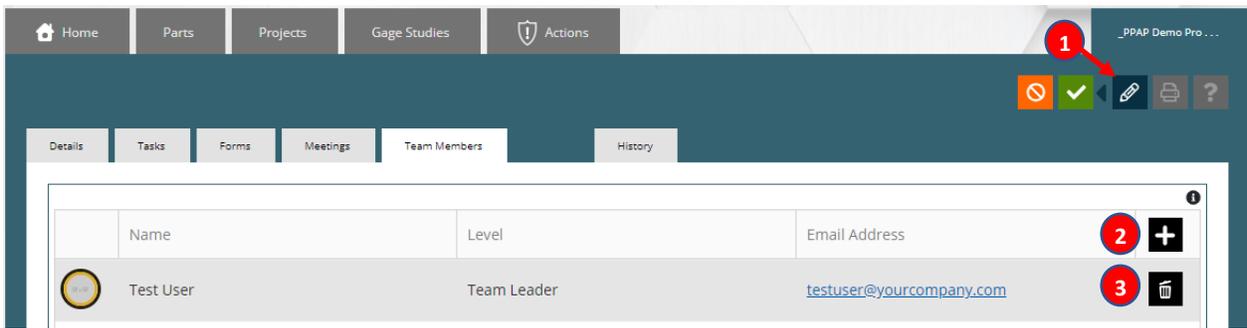
1. **Single or multi-column process flow:** Process flow diagram can be shown with all operation type columns or collapsed to a single column.
2. **Operations Only:** Quickly hide all columns outside of Operations.
3. **Visual Mode:** Display the Process Flow as a single diagram with all column data included:

Meetings



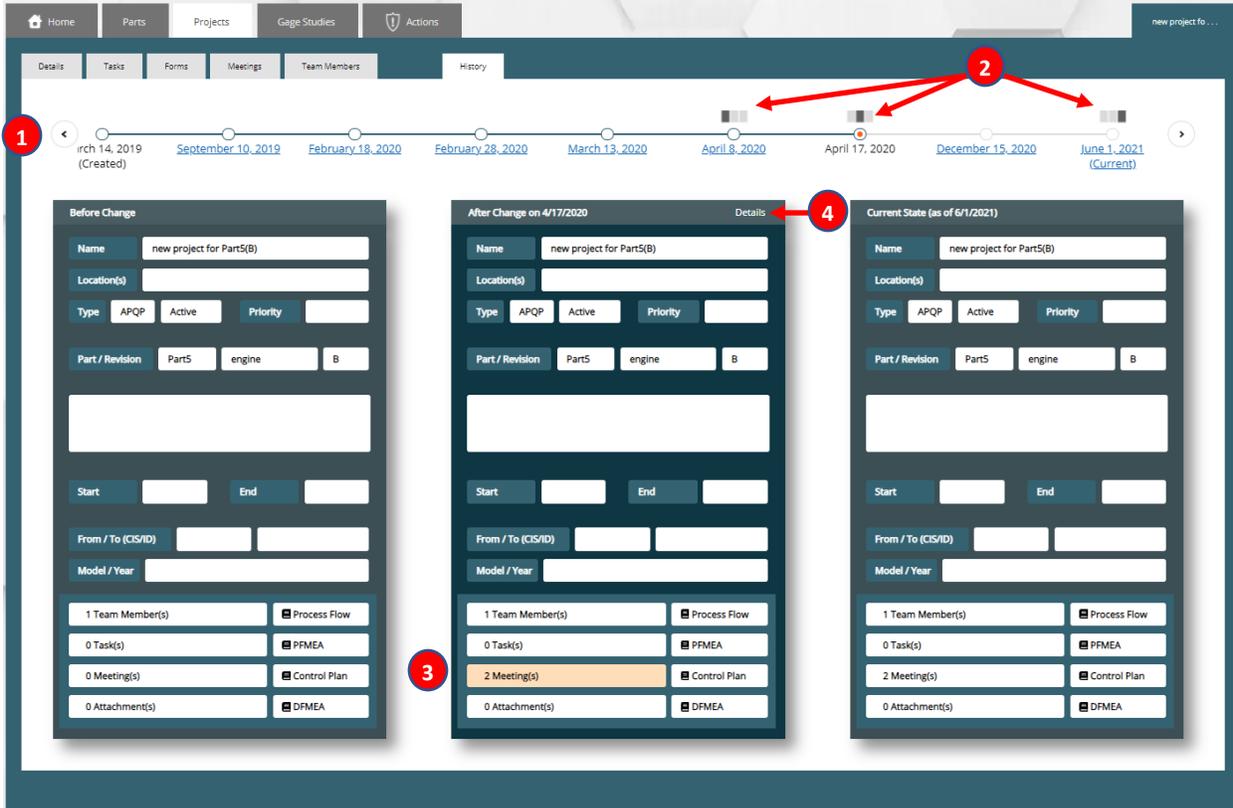
1. **Create New Record:** Create new Meeting record.
2. **Print/Export:** Export list to supported file formats.
3. **Help:** Interactive help tutorial.
4. **Search:** Filter data and highlight search results for records displayed in grid list.

Team Members



1. **Edit:** Click to enable editing.
2. **Add New Team Member:** Select team member based on persons registered in CTS. Upon assigning a person and saving the record, the assigned user will receive an email notification from CTS with a link to navigate to this specific project record.
3. **Remove Team Member:** Click to remove team member from Project.

History



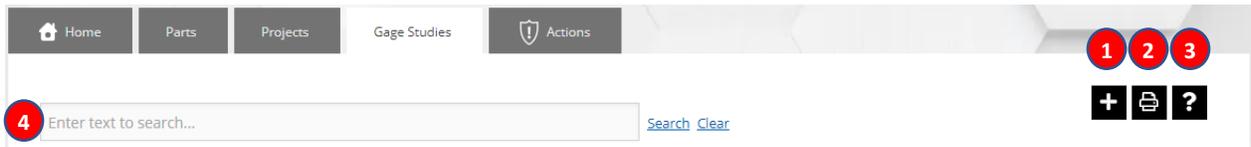
Project History shows a timeline of dates of changes to the project. Dates can be selected to view the changes that occurred on that date (middle panel) as well as the state of the project before the changes (left panel) and the current state of the project (right panel).

1. **Timeline:** Select a date on the timeline to view changes on that date.
2. **Panel icons:** These icons above the timeline indicate the dates that correspond to the project information displayed on each of the three panels.
3. **Highlighted changes:** Changes to the project for the selected date are highlighted in the middle panel.
4. **Details link:** Click this link to view a popup window of specifics about the changes including who made each change.

Gage Studies

There are two ways to enter Gage Studies in CTS. You can either upload studies generated outside of CTS as an attachment or directly enter gage study data to generate and view results reports for supported study types Variable (TV/Tol), ANOVA and Attribute. Once entered, gage study records can be simply linked to project tasks.

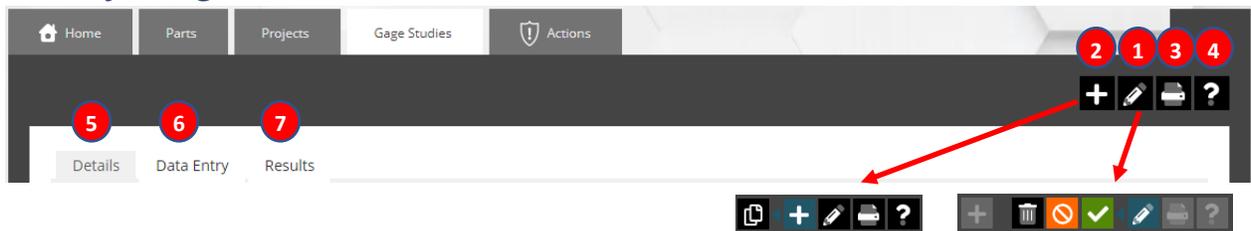
Create New Gage Study Record



1. **Create New Record:** Create new Gage Study record.
2. **Print/Export:** Export list to supported file formats.
3. **Help:** Interactive help tutorial.
4. **Search:** Filter data and highlight search results for records displayed in grid list.

Overview of Gage Study Records

Primary Navigation

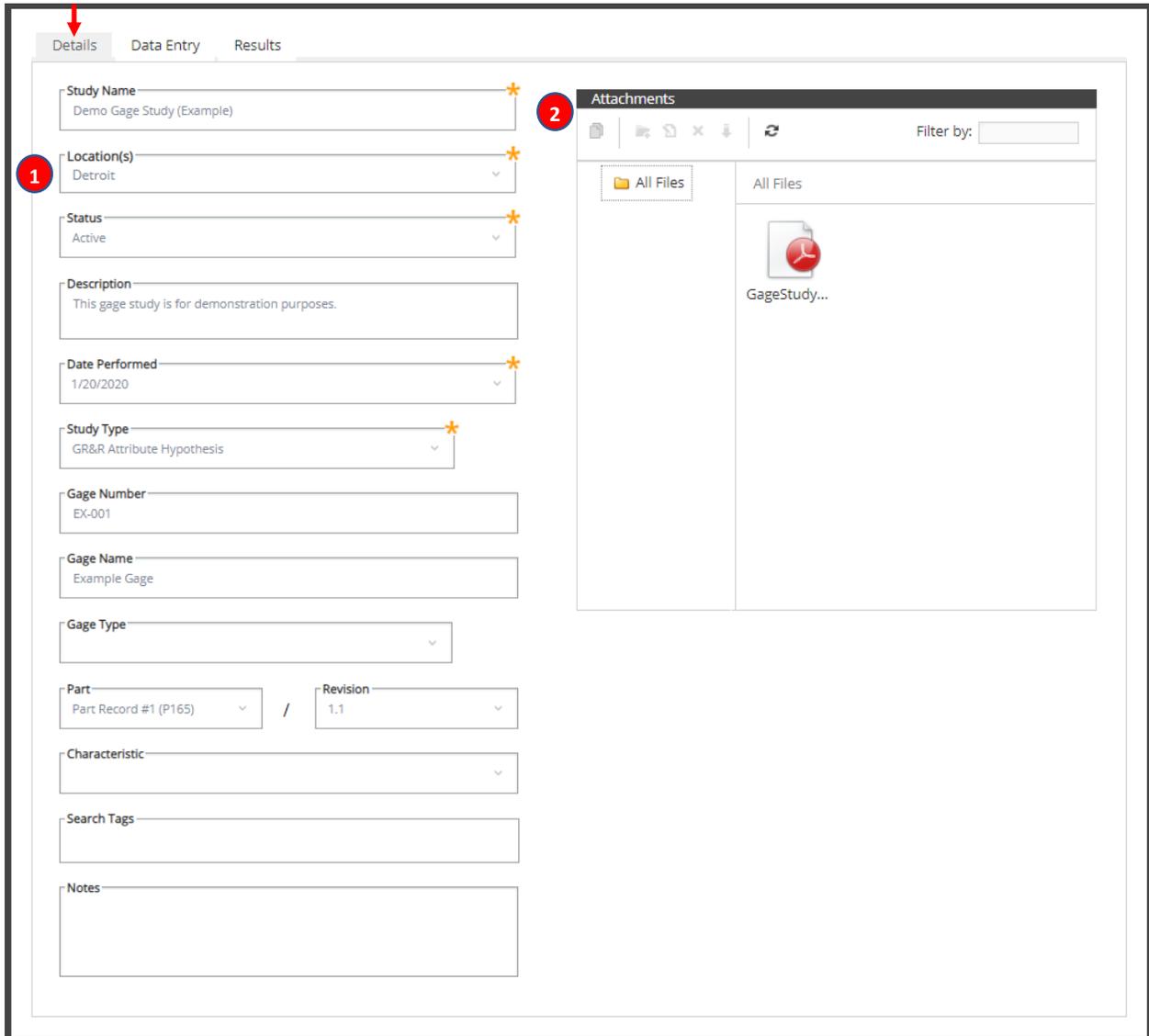


1. **Edit:** Edit (and delete) record. While in edit mode, other users will not be able to edit the record. Once you click the green save icon, the record is locked and you need to click 'edit' again if you want to continue editing.
2. **Add Menu Options:** Provides expanded options, including the ability to copy record.
3. **Print/Export:** Export record to supported file formats.
4. **Help:** Interactive help tutorial.

Gage Study Tabs

5. **Details:** Manage general gage study details.
6. **Data Entry:** Manage and enter study data to be included in "Results" report, including number of appraisers, samples, trials, lower/upper specification and the study data itself. NOTE: *This tab is only used when entering gage study data directly in CTS.*
7. **Results:** View and print study results. NOTE: *This tab is only used when entering gage study data directly in CTS.*

Record Details



The screenshot shows the 'Record Details' page in the AIAG CTS software. The page is divided into three tabs: 'Details', 'Data Entry', and 'Results'. The 'Details' tab is selected. The main content area is split into two columns. The left column contains a form with the following fields: 'Study Name' (text input, value: 'Demo Gage Study (Example)'), 'Location(s)' (dropdown menu, value: 'Detroit'), 'Status' (dropdown menu, value: 'Active'), 'Description' (text area, value: 'This gage study is for demonstration purposes.'), 'Date Performed' (dropdown menu, value: '1/20/2020'), 'Study Type' (dropdown menu, value: 'GR&R Attribute Hypothesis'), 'Gage Number' (text input, value: 'EX-001'), 'Gage Name' (text input, value: 'Example Gage'), 'Gage Type' (dropdown menu), 'Part' (dropdown menu, value: 'Part Record #1 (P165)'), 'Revision' (dropdown menu, value: '1.1'), 'Characteristic' (dropdown menu), 'Search Tags' (text input), and 'Notes' (text area). The right column contains an 'Attachments' panel with a 'Filter by:' dropdown and a list of files. A file named 'GageStudy...' is visible. Red callout boxes with numbers 1 and 2 are overlaid on the image. Callout 1 points to the 'Location(s)' field, and callout 2 points to the 'Attachments' panel.

1. Account security (permissions) is based on the Locations assigned to users. If you are assigned to a location, you have complete access (view, edit, delete). Users can be assigned to 1 or more locations.
2. Upload general attachments for reference or inclusion in Publish Project export.



AIAG CTS Software – User Guide

Actions

A consolidated list allows you to see and navigate through the tasks assigned to you, plus all parts, projects and gage study records that you have access to on a single screen.

Tasks that are assigned to you:

Id	Name	Priority	StartDate	EndDate	Complete
667	Subtask 3	Low	1/1/0001	1/1/0001	10

Projects that you are part of:

Id	Name	Type	PartNumber	RevNumber	DueDate	
161	Seat Assembly	PPAP			1/31/2019	open
412	Temporary project	APQP			1/29/2019	open
413	Temporary project	APQP			1/28/2019	open
414	Temporary project	APQP			1/15/2019	open
417	Temporary project	APQP			1/3/2019	open
447	Temporary project	APQP			1/20/2019	open

Parts that you have created:

Id	Name	Reference	Status	Stage	Group	
27	Oil pressure gauge	9874561		Prototype	Group A	open
28	Square Wheel1	9874561		Prototype	Group A	open

A user also may also create new Part, Project and Gage studies from the Actions section. Click directly on the record icon to create a new project, part or gage study.

+

+

Create New

- Project
- Part
- Gage Study

Select a New Action you wish to Create



AIAG CTS Software – User Guide

Reports

Run report for Parts, Projects and Gage Studies. NOTE: *You can also export/print records from most screens in CTS by clicking on the printer icon.*

Parts | **Projects** | Gage Studies

Part Report

Location: All | Status: All | View: List | Submit

Created Date (Start / End): Start any date | End any date | Number/Name: All | Revision status: All

Type: All | Product family: All | Search tags:

Page 1 of 2 | PDF

Part Summary Report

Part Number	Part Name	Location(s)	Status	Stage	Program	Rev
PT-13	test part	Test Org, London, Texas	Active	Production	Original	1
14t69a-2	Fusionmanatorz	Test Org, London, Detroit	InActive	Prototype	Original	B

Attachments

Documents can be attached throughout the system, including:

- Parts
- Projects
- Tasks
- Gage Study

Edit Options



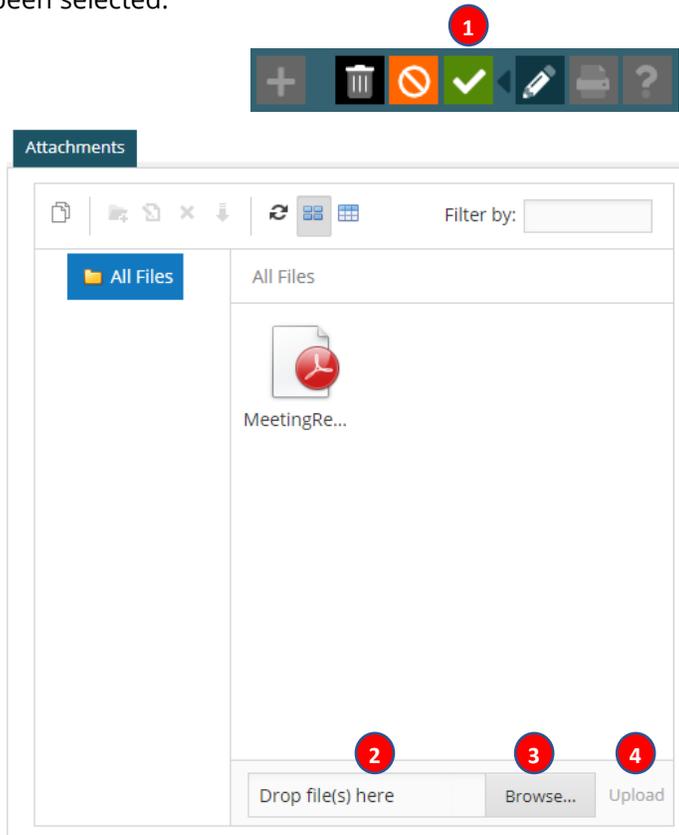
Filter by:

1. Create (F7) File
2. Rename (F2) File
3. Move (F6) File

AIAG CTS Software – User Guide

4. Copy
5. Delete (Del)
6. Refresh
7. Download
8. Search filter

All these options are enabled when a file is selected, but only required fields are enabled when none have been selected.



1. To add files in attachments section, make sure you are in edit mode.
2. You can drag and drop files here to upload them.
3. Alternatively, you can click on browse and find the file in your PC
4. At the end, you can click upload button to save files in attachments and that should show up in viewer.