

Aras Innovator 8 Release Notes



Aras Innovator 8.1

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ARAS CORPORATION

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Release History

Version	Date	Comments
8.0	09-29-2006	Initial Release
8.1	12-01-2006	Planned Maintenance Release
8.1.1	04-04-2007	Planned Maintenance Release



1 Overview

The Aras Innovator[®] 8 release is an important release for a number of reasons, beginning with the introduction of the Unlimited user license format. The Certified Enterprise Solutions have been enhanced to deliver greater functionality to address specific business processes, while operating in a highly integrated fashion on the Aras Innovator Enterprise Application Framework.

The following sections provide a high level overview of the Certified Enterprise Solutions.

1.1 Aras Program Management

Aras Program Management is for performance driven companies of all sizes that require a practical solution for managing phase-based projects in a milestone & deliverable structure across the company and around the world with suppliers and customers.

Aras Program Management delivers strategic value by providing visibility across the entire portfolio of project programs. The solution combines executive dashboards based on real-time roll-ups of actual project management activities and deliverables with enhanced project status reporting. Team members collaborate effectively by simultaneously accessing the project plan online from anywhere in the world to get the latest status, receive updates, upload information, and complete activities. Traffic light indicators provide managers up to the minute status at a glance focusing attention on activities or projects that require action. Aras Program Management incorporates the PMI principles for managing projects.

Project templates define company standards and incorporate best practices as a starting point for future projects. The shared project knowledge repository enables projects to get started quickly. The Web-based solution improves program operations by standardizing similar project types and improving communication across the enterprise and with suppliers and customers.

Unmatched flexibility enables application modification to address specific competitive practices and provides the foundation for continuous improvement leading to greater effectiveness and shorter cycle times. Aras Program Management interoperates seamlessly with the other Aras solutions for Product Engineering and Quality Planning as well as new solutions created. When combined Aras solutions deliver comprehensive business functionality or use each independently to compliment existing systems and leverage previous technology investments.

1.2 Aras Product Engineering

Aras Product Engineering is for performance driven companies of all sizes that require a practical solution for product definition and change management across the company and around the world with suppliers and customers.

Aras Product Engineering delivers strategic value by providing actionable dashboards for visibility into key development indicators increasing productivity and streamlining development operations to improve profitability. Manage the product definition processes securely online to develop high quality products on time and on budget. Web-based change management workflow processes reduces cycle times and control product information release between departments, divisions, suppliers, and customers for effective coordination.



Product and process information reuse increases productivity. Aras Product Engineering incorporates the CMII principles for Configuration Management.

Unmatched flexibility enables application modification to address specific competitive practices and provides the foundation for continuous improvement leading to greater engineering effectiveness. Aras Product Engineering interoperates seamlessly with the other Aras solutions for Program Management and Quality Planning as well as new solutions created. When combined Aras solutions deliver comprehensive business functionality or use each independently to compliment existing systems and leverage previous technology investments.

1.3 Aras Quality Planning

Aras Quality Planning is for performance driven companies of all sizes that require a practical solution for managing quality planning and risk management processes across the company and around the world with suppliers and customers.

Aras Quality Planning delivers strategic value by providing a process-based approach to managing risks and preparing quality compliance documents for preproduction planning and product launch. Customer specifications, compliance requirements, and lessons learned from previous projects are captured in "templates" and become standard for all new product projects ensuring that the latest knowledge is incorporated. The Web-based quality planning solution improves product development operations by re-using information across parts, plants, and documents. Aras Quality Planning incorporates principles for Quality Planning found in the Advanced Product Quality Planning and Control Plan reference manual (APQP) and Potential Failure Mode and Effects Analysis reference manual (FMEA).

Unmatched flexibility enables application modification to address specific competitive practices and provides the foundation for continuous improvement. Aras Quality Planning interoperates seamlessly with the other Aras solutions for Program Management and Product Engineering as well as new solutions created. When combined Aras solutions deliver comprehensive business functionality or use each independently to compliment existing systems and leverage previous technology investments.



2 Product Features

The following section provides a brief overview of the features included in Aras Innovator 8. The sections describe the features for each Solution as well as an overview of some of the most significant enhancements to the Aras Innovator Enterprise Application Framework.

2.1 Aras Innovator Enterprise Application Framework

Aras Innovator includes numerous features within the Enterprise Application Framework, most of which are specifically designed to support the Solutions.

2.1.1 Single Sign-On

The Aras Innovator Single Sign-On feature provides a mechanism for companies to take advantage of an existing user authentication scheme so that an Aras Innovator login can be processed without the user entering an Aras Innovator specific password.

This feature has been architected so that it can be easily configured to adapt to an Active Directory / LDAP environment or, if the company has another user authentication scheme, hooks have been included to integrate a non-standard method.

2.1.2 Relationships to Multiple Item Types

An Aras Innovator administrator is now able to create a relationship definition that has multiple Item Types as the target of the relationship. This new feature, known as a PolyItem, greatly simplifies the task of creating Aras Innovator data models in which one item type must reference various other item types. Use a single relationship rather than creating a relationship for each and every Item Type referenced.

Another benefit for the end user is that now a single tab consolidates a large set of related Items in a single, tabbed view.

2.1.3 Aras Innovator Service

The Aras Innovator Service is a Windows executable program that runs as a Windows Service. It is used to automatically run Aras Innovator Methods on a periodic schedule, as specified in the InnovatorServiceConfig.xml file.

A single running instance of the Aras Innovator Service can be configured to periodically connect to any number of Aras Innovator Servers and for each Aras Innovator Server run any number of Methods. The standard Windows Event Viewer is used for logging program status and error messages.

Examples of Aras Innovator Service uses are:

- Running a Method that creates and sends Workflow reminder emails
- Running a Method nightly that creates a report and mails it to a set of users
- Running a Method nightly that updates time sensitive information for various item types



2.1.4 Combined In Basket

Aras Innovator has three types of user assignments – Workflow Activities, Project Activities, and FMEA Action Items. The Aras Innovator InBasket consolidates these assignments so that a user can view all their assignments on a single screen.

Each user can control their In Basket display to include assignments by type and/or status in any combination of the following;

- Type – Workflow Activity, Project Activity or FMEA Action Item
- Status – Active or Pending



2.2 Aras Program Management

The following provides an overall summary of features in the Aras Program Management solution. This list is a high level summary and is intended to provide a general overview of the Solution functionality.

2.2.1 Dashboard Consoles

Dashboards are used to quickly display the status of the entire project portfolio or a specific set of program projects. Dashboards display traffic light indicators so executives and project managers focus on the projects or activities that require their attention. Users can quickly filter dashboards by a variety of fields to view only relevant projects.

2.2.2 Phases, Milestones, and Work Breakdown Structures (WBS)

Aras Program Management provides project managers with the ability to organize projects in the context of a WBS with related milestones as defined by the PMI Project Management principles.

WBS elements are used to organize a project in a work context that is important and relevant to product development operations. In many cases, companies use WBS elements to model program phases to support a phase-based project management model where phases can be defined to run sequentially or concurrently. In other situations, a project manager may want to break down projects by department or by functional areas of a product.

Milestones can be defined within the context of the WBS to identify and establish critical dates to which the project must be managed. Special scheduling options are available to allow the project manager to specify if the project plan is completely driven by milestone dates or by the scheduled start or finish dates.

2.2.3 Deliverables

Deliverables are the essential outputs of a product development project. They can consist of basic documents such as specifications, design documents or financial plans. Alternately, they can include Engineering Change documents, Bills of Material, Quality Planning documents (such as FMEAs, Control Plans and Process Flow Diagrams), and other items from custom solutions.

Aras Program Management is seamlessly integrated with standard Aras Innovator document management functionality as well as the Product Engineering and Quality Planning solutions to provide direct linkage to all of the deliverables identified above. The ability to manage the in-process status of the deliverables in real time, in the context of the project plan, is essential to providing the appropriate depth of information to executives and project team members.

2.2.4 Project Templates

Project templates standardize the phases, milestones, activities, and deliverables by project type and provide the consistent starting point for new projects. Project templates enable the designation of different project structures for different project types, product families or product lines, manufacturing sites, or customers.



Deliverables, activities, or compliance requirements can be embedded in a template to ensure inclusion.

Lessons learned from previous projects can be included in templates moving forward institutionalizing continuous improvement. Project templates provide a single project knowledge repository. In addition, standardized templates provide a consistent framework for KPI metrics.

2.2.5 Scheduling

Aras Program Management supports multiple scheduling algorithms; forward, backward and milestone scheduling.

Forward scheduling allows project managers to create dependencies between any activities and milestones to define precedence for all planned activities. This method uses the target start dates and durations as the basis for driving target completion dates for activities, milestones and the project as a whole.

Backward scheduling applies the principles in setting precedence, but uses target completion dates as the basis to set and plan activity start dates.

Milestone scheduling provides a more basic phase-based scheduling model without the associated complexity of activity and milestone precedence.

2.2.6 Resources

Resource assignments are modeled easily by creating project team definitions in each project template. When a new project is created from a template, individual assignments are automatically created throughout the project by simply identifying the users that will be fulfilling each role on the project team.

Individuals are able to track and respond to their assignments by reviewing their personal InBasket view in Aras Innovator. The InBasket provides each user with a list of their activity assignments that can be filtered and sorted by project, status, date or other criteria. This capability fosters a highly collaborative and accountable environment in which each user is responsible for the progress and status reporting of activities.

2.2.7 Activity Management

Activities and actions can be managed based on schedule and cost. Each user has an in-basket with assigned activities. The system automatically flags an activity that could have a negative impact on the project schedule based on definable business rules. All members of the team have instant visibility into all of the project activities and the current status of each. Activities can reference predecessor activities that must complete prior to the start of the successor activity.

Each activity can have associated timesheets where users record time spent on a given activity. The information can be used to calculate the amount of time and resource dollars spent on a given project.



2.2.8 Reports

Providing a set of popular reports allows companies to focus time on their business needs, not on creating reports. Aras solutions provide robust and easy to use reports and utilize the Reporting Services capabilities of Microsoft SQL Server for custom report writing.

Standard reports can be further customized to create company, site, or industry specific versions.

Prepackaged reports include:

- ◆ Gantt Chart
- ◆ Resource Time Report



2.3 Aras Product Engineering

The following provides an overall summary of features in the Aras Product Engineering application. This list is a high level summary and is intended to provide a general overview of the Solution functionality.

2.3.1 Engineering Change Management

Aras embeds Problem Report (PR), Engineering Change Request (ECR), and Engineering Change Notice (ECN) documents and workflows that conform to the CMII principles. The engineering change workflow includes a Fast Track option for quick processing and standard reports based on the CMII reference model. The Aras change management functionality helps companies:

- Control product information changes between departments, sites, divisions, suppliers and customers worldwide
- Increase visibility into pending and released changes and the items affected by the changes
- Automate and streamline change control processes with online, graphical workflow

Both the ECR and ECN allow referencing of items that are affected in the change process. Actions can be associated with each affected item such as add, change, and delete.

2.3.2 Document Management

Centralized vaulting of documents and files with association directly to a product or part, combined with a change management environment helps companies control intellectual property and collaborate effectively over the Internet. Document management is used to store, search and control a product's requirements, specifications, and related documentation as it evolves and changes over the lifecycle of the product. The document definition allows multiple files to be attached to a single document item with classification-based metadata descriptors.

2.3.3 BOM Management

Aras Product Engineering provides the ability to define a multi-level product Bill-Of-Material structure (BOM). A BOM is a hierarchical list of sub-assemblies, components, and/or materials that make up the higher level component, assembly, product or system. Nested BOM structures are supported.

2.3.4 Alternate and Substitute Parts

Parts can be defined with a list of Alternate parts. Alternate parts represent globally interchangeable replacements that meet the required form, fit, and function requirements. Alternate parts can be used in place of the original part during manufacturing, field service, or maintenance repair and overhaul without compromising quality or reliability.

Substitute parts are BOM-specific Alternates. Substitute parts can only be used in place of the original part for the designated Bill-Of-Materials.



2.3.5 AVL/AML

Approved vendor lists (AVL) and approved manufacturers lists (AML) can be defined and linked to specific parts. Manufacturer/Vendor-specific information such as data sheets, catalog numbers, certification status, and other important information for the externally acquired or manufactured parts or material can be maintained. Support for AVL/AML definitions enables a company to create, share, manage, and track supplier performance status on a part-by-part basis.

2.3.6 Classification Driven Parts & Documents

Classification provides a robust way to manage complex types of part and document definitions bound by a predefined structure. Class properties are hierarchically inherited so relevant data is captured for each item within the context of its parent structure. Starter classification structures are provided and attached to the part and document definitions. These structures can be extended to best represent unique classification requirements.

2.3.7 State-Driven Business Processes

Business objects governed by state-based intelligence enable software to directly reflect a company's process. A lifecycle definition can be assigned to items within Innovator which then governs the allowed set of states (e.g., New, Prototype, Production, etc.) that an item can exist. Each entry or exit into a different state can change access permissions, send notification, and trigger custom business logic. The application provides predefined lifecycle maps on the following Items:

- ◆ Parts & Documents
- ◆ ECRs, ECNs, PRs
- ◆ AMLs, AVLs

Additionally, ECN workflow logic automatically controls promotion to different states as workflow is completed.

2.3.8 Design-to-Goal

Parts can have defined goals such as cost and weight. Every part can be defined with a target, estimated and actual values. Overall rollups are dynamically calculated by evaluating a Part's entire BOM structure. Rollup of cost and weight of complex product structures enables one to evaluate goals against estimated and target values to determine engineering effectiveness and predictability in goal achievement.

2.3.9 Scorecards

Tracking key performance indicators (KPIs) is important to business success. Aras provides the ability to define metrics and display the results graphically using scorecard charts. Each metric series can include a hyperlink to open a specific item, to generate a report, or to invoke other custom business logic. Aras provides several standard KPI metrics for product development. These KPI metrics enable companies to focus better on strategic activities & innovation to increase overall product development effectiveness. Standard scorecard charts include:

- ◆ Product Innovation
 - # of changes per quarter: Product Improvement vs. Corrective Action



- Changes by origin
- ◆ Engineering Efficiency
 - Change cycle time: Fast Track vs. Standard Process
 - Time spent in each department
- ◆ Design to Goal
 - Cost vs. Goal
 - Weight vs. Goal
- ◆ Engineering Optimization
 - Parts used in multiple products
 - # of new parts by quarter
- ◆ Time to Manufacturing
 - Average time to release to manufacturing

2.3.10 Reports

Providing a set of popular reports allows companies to focus time on their business needs, not on creating reports. Aras solutions provide robust and easy ways to use reports and utilize the Reporting Services capabilities of Microsoft SQL Server for custom report writing.

Standard reports can be further customized to create company, site, or industry specific versions.

Prepackaged reports include:

- ◆ Multi-level BOM
- ◆ Quantity Rollup Report
- ◆ BOM Costing Report
- ◆ Problem Report (PR Report)
- ◆ PR Log Report
- ◆ ECR Report
- ◆ ECR Log Report
- ◆ ECN Report



2.4 Aras Quality Planning

The following provides an overall summary of features in the Aras Quality Planning solution. This list is a high level summary and is intended to provide a general overview of the Solution functionality.

2.4.1 Failure Mode & Effects Analysis (FMEA)

FMEA functionality helps companies identify and mitigate reliability risks during design, development and engineering. Aras supports two types of FMEAs: Product Design FMEAs (DFMEAs) and Manufacturing Process FMEAs (PFMEAs).

As opposed to using spreadsheets, Aras FMEA functionality is supported by a centralized database creating a true set of living documents. FMEA information is accessible online over the Internet simultaneously by multiple users enhancing collaboration.

A process-based approach drives FMEA characteristics through related quality planning and product development documents for consistency, coordination, and control.

2.4.2 FMEA Actions

FMEA Actions are activities within Aras. Actions are initiated and assigned to a specific person and then appear in the person's in-basket. As Actions are completed they are removed from a person's in-basket and the entire product development project team is immediately aware of the status for enhanced collaboration. Reports provide a quick snapshot as to the overall product FMEA status.

2.4.3 Process Flow Diagrams

Process flow diagrams (PFDs) graphically define the production process providing a definition of the steps and stages during manufacturing and focusing the product development team on the overall process as opposed to individual parts or operations. Process flow diagrams are integrated with FMEAs and Control Plans for data reuse, consistency, and coordination.

2.4.4 Control Plans

Control Plans define the characteristics, inspection & test parameters, and specification measurements and tolerances for a new product to meet quality, reliability, and customer requirements. A Control Plan describes the mechanisms and actions required at each step of the manufacturing process to assure consistency and minimize variability.

2.4.5 Application Sensitive Data Entry

Intelligent grids enable complex data relationships to be easily displayed and edited in a spreadsheet-like format. The intelligent grids automatically merge cells or create nested branches to simplify document creation and improve usability. Grids can easily be extended and configured to include additional information while retaining formatting and data integrity.



2.4.6 Libraries

Specific libraries can be established to standardize fields such as Failure Modes, Effects, and Control Mechanisms. Fields can be grouped by product family or product line, customer-specific requirements, supplier capabilities, or other categorization methodologies. Standard fields make creating quality documents fast and easy and simplify data analysis.

2.4.7 Quality Plan Linkages

Aras maintains relationship links between quality planning items throughout the product's lifecycle so that when information is updated in one place it is automatically added to other related items. FMEAs, Control Plans, and PFD's are integrated so that the required information, such as the characteristics and operations, is shared between all documents automatically.

Quality plans can be accessed directly or from the Part Item so product development teams have the necessary information at their fingertips. Team members can add additional information to quality plans easily facilitating collaboration. Information linkage reduces the time and resources needed to gather the relevant information for reporting or submitting to a customer, or for auditing.

2.4.8 Part Family Support

Part families allow for a creation of a single FMEA to be shared by multiple parts. This reduces the amount of data that needs to be entered and maintained and provides consistent documentation across an entire line of products. Changes and updates made in one place propagate automatically to all the connected documents.

2.4.9 Product Templates

Product Templates provide a standard basis for new products with a consistent set of embedded requirements for product development. Templates enable the designation of different quality requirement structures for different project types, product families or product lines, manufacturing sites, or customers. Compliance requirements can be embedded in a template to ensure inclusion.

Field failure and reliability testing results from existing products can be included in templates moving forward institutionalizing continuous improvement. Product templates provide a knowledge repository of product development quality practices. In addition, standardized templates provide a consistent framework for future data analysis.

2.4.10 Document Management

Documents are created and stored in a secure, centralized database providing online access, intellectual property control, data & document reuse, and document linkage relationships. The Web browser-based system includes comprehensive revision change control based on the CMII principles for configuration and change management and maintains a complete revision history (see Aras Product Engineering section).

2.4.11 Reports

Providing a set of popular reports allows companies to focus time on their business needs, not on creating reports. Aras solutions provide robust and easy to use reports



and utilize the Reporting Services capabilities of Microsoft SQL Server for custom report writing.

Standard reports can be further customized to create company, site, or industry specific versions.

Prepackaged reports include:

- ◆ Design FMEA
- ◆ Process FMEA
- ◆ FMEA Actions
- ◆ Process Flow Diagram
- ◆ Control Plan



3 Upgrading from Previous Releases

There are four potential states from which a customer may wish to upgrade to Aras Innovator.

1. Aras Innovator 8.0 is running in production and you wish to upgrade to the Aras Innovator 8.1 release (no Solutions).
2. You are running a version of Aras Innovator that is previous to release 8.0.
3. Aras Innovator 8.0 is running in production and you wish to upgrade to the Aras Innovator 8.1 release with the Solutions.
4. Aras Innovator 8.1 is running in production and you wish to upgrade to Aras Innovator 8.1.1, please see the *Aras Innovator – Installation Guide*.

The Aras Innovator upgrade utilities are designed to upgrade customer databases from Aras Innovator 8.0 (any patch release) to Aras Innovator 8.1. The following sections will provide you guidance as to how to upgrade from any of the three described states.

3.1 Upgrading to Aras Innovator 8.1 from Aras Innovator 8.0

The upgrade utility for Aras Innovator 8.1 provides you with all the tools required to migrate your production Aras Innovator 8.0 (any patch release level) version directly to Aras Innovator 8.1.

Please follow the instructions in the *Aras Innovator– Installation Guide* to ensure you follow the proper procedures for upgrading your installation.

3.2 Upgrading to Aras Innovator 8.1 from Early Releases

Customers that plan to upgrade to Aras Innovator 8.1 from releases previous to Aras Innovator 8.0 have two options.

The first option is to request all the major release installation kits between your current release and Aras Innovator 8.1. For instance, if you are running release 6.1.4, you would need release kits for Aras Innovator 7.0, Aras Innovator 7.1, Aras Innovator 7.2, Aras Innovator 8.0, and Aras Innovator 8.1. Your upgrade process would be to install each version in ascending order, updating your database at each step. Please contact Aras customer support to ensure you are following the correct procedure.

The second option is to contact Aras Consulting Services and request to have your database upgraded by Aras as a service.

3.3 Upgrading to Aras Innovator 8.1 Solutions

Customers that plan to upgrade their solutions from a release prior to Aras Innovator 8.1 to Aras Innovator Solutions 8.1 must contact Aras for Consulting Services. Because there is no automated utility to perform the upgrade, you will need the guidance and expertise of a qualified Aras consultant.



4 Bug Fixes and Known Issues

4.1 Version 8.1.1

Aras Innovator 8.1.1 is a patch release which primary objective is to address a number of customer community identified issues.

4.1.1 Issues Fixed in 8.1.1

Framework

Issue #	Description
008621	Standard Client side validation for all fields on Forms and Editable Grids (type, length, existence...)
008669	When a new File Type is defined, existing Files are associated with the newly created File Type.
008675	Tools-->Admin-->Rebuild Keyed Names invokes Server Event for each Item
008867	Enhanced compatibility with Microsoft Internet Explorer 7 (Related Issues: 008867, 008871, 008909)
008903	The toolbar .NET control supports a label to be displayed before a Choice list
008952	Improved support for the German and French IIS and SQL Server configurations. (Related Issues: 008952, 009022, 009060, 009048, 009039, 009043, 009064)
009018	Support for the date patterns on the system properties of type date
009020	The format of the "As of" date in main grid corresponds to query type (Latest, Released, etc)
009034	Working directory dialog now displays mapped drives.
009037	Sort Across pages guaranties the stable order even if criteria is not unique.
009076	Added support for .deleteRow in TreeGrid .NET control event handlers.
009148	The grid.initXMLRows() method of .NET controls API supports all valid XMLs passed to it.
009159	Administrators can create a composite unique constraint when the existing values of the individual properties constituting the constraint are not unique.
009161	Where Used functionality is corrected to allow expansion of nodes.
009178	A float relationship to a versionable related item will always point to the latest version, independent of the previous state.
009182	F5 key is disabled on all Aras Innovator windows to prevent re-loading the IE window.
009210	Calendar dialog is improved.
009218	OnGet and OnBeforeGet methods, not using the IOM, now retrieve the Item ID as a property and not as an attribute from InDOM.
009221	More robust handling of the loops in the Identity structure.

Program Management

Issue #	Description
008990	Enhanced percent completion calculations in Projects to better reflect activity completion status. (Related issue: 008994)
008891	Added support of the user defined Actions in Project Tree with the same capabilities as in Relationship Grids
008994	Enhanced percent completion calculations in Projects to better reflect activity completion status. (Related issue: 008990)
008993	Email is sent to all Activity Assignments if Activity is activated, not just to the Activity Leader.
009007	Implemented proper use of roles in Projects for the Project Activity assignments and lead assignments



009017	Versionable ItemTypes do not require a Default Life Cycle.
009128	Pick/Replace on Team Tab works properly now
009137	Activity Completion Dialog uses the default.css.
009141	Fixed problems with setting Activity Completion Dialog's Actual Start Date.
009162	Fixed the "On Activity Update" mode of the Project Update Modes.
009190	Introduced new unique constraint on the Project Team. Each Project can have one Identity assigned to each Project Team Role.
009196	"Activity Assignment" Form refresh is improved.

Product Engineering

Issue #	Description
008879	Added a report to list Parts causing circular references in the Part BOM structure.

Tools and Utilities

Issue #	Description
008384	Solutions Upgrade Tool supports foreign properties
008658	Introduced Vault Restorer tool for assisting with major rebuilds of Aras Innovator vaults from backups.
009088	Introduced an interactive GUI utility to manually set up .NET security policies on the client.
009247	Enhanced Solutions Upgrade tool to allow the Package Definition tool to be executed from the command line.

4.1.2 Known outstanding issues in 8.1.1

Framework

Issue #	Description	Workaround
006830	Cannot change a text property from "not required" to "required".	A workaround has been provided in the on-line help of Innovator.
007281	Vault server cannot resolve host name	The vault URL computed by Innovator can fail to calculate based on DNS settings. If you encounter a problem resolving the vault URL, please contact Aras support.
008185	On-line help is incomplete	Not all new features in Aras Innovator have been documented in the on-line help section of Innovator. Please contact Aras support if you are having difficulty with a new feature.
008651	Items added using AML with action="add" will leave the added Item unlocked. Items added using the IOM with the will leave the added item locked. This inconsistency will be removed in a future release to leave added items unlocked, regardless of the use of AML or IOM.	Set the locked_by_id property to the user id to leave the item locked. Set the locked_by_id explicitly to a blank/null value (e.g. setProperty("locked_by_id","") to leave the item unlocked.
009346	References to polymorphic_item_onGet need to be deleted	This method is no longer supported and will be deleted in the next major release. Any references to the method should be removed if they are causing errors.
009389	Items left locked after manual versioning can result in inconsistent	If you intend to edit File properties of a manually-created version, always unlock the



	vaulted data during checkout/checkin of files from a property of type Item with source File.	version first, then lock it again and proceed with editing.
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Quality Planning

Issue #	Description	Workaround
007624	Characteristic browser out of sync with displayed value when QP document promoted from Baseline to In Work state	The workaround for the problem is to open a characteristic browser and select a latest version of a characteristic, if desired. This should be done individually for each line in each document which got out of sync due to the versioning of a characteristic(s).

4.2 Version 8.1

Aras Innovator 8.1 is a maintenance release which primary objective is to add functionality to the Program Management Solution. This release also introduces a number of enhancements to the Framework and the other Solutions in response to customer's feedback.

4.2.1 Enhancements in 8.1

4.2.1.1 Technology

- Aras Innovator client is supported in Microsoft Internet Explorer 7

4.2.1.2 Enterprise Application Framework

- Administration
 - Allow Fields to be disabled on the Form definition
- API
 - Added support for grid drag and drop events

4.2.1.3 Program Management

- Project Critical Path is calculated and highlighted in the Project tree
- Project Critical Path constraint dates enforced in project scheduling
- Project Template tree supports filtered searches
- Enhanced calculation of Start/End Dates based on duration
- Support for scheduling of FF SS FS SF Precedence types, lead and lag activity
- Multiple Assignees for Project Activities
- Activity Completion Dialog supported as standard Aras Innovator Form to facilitate customization
- Activity and Activity Assignment completion support customer defined rules.



- Update Project and Schedule Project methods support customer defined rules on the scope of an individual project
- Automatic invocation of Scheduling and Project update on different events, customizable on the scope of an individual project

4.2.1.4 Product Engineering

- Improved performance in Part Goal rollup calculation
- Added new action to recalculate rollup of Part Goals for all Parts in the database
- Improved infinite loop handling in Part BOMs
- Values for part cost can use decimal format that can be customized and the calculations will dynamically adjust to the new format

4.2.2 Issues Fixed in 8.1

Framework

Issue #	Description
008274	Improved stability of the client on very slow networks or machines
008664	Added the ability to export using a manifest file in the Console Upgrade Tool. Allowing the export of a subset of the database packages from the command line.
008750	Display of image cells refreshed after unlock without save.
008752	Added GridDragDrop, GridDragEnter event handlers to the grid control.
008773	Improved refresh of Workflow Process form after changes are made.
008809	Performance of versioning an Item is improved
008819	When the Grid fires a drop event, it now passes the Row and Col to the event handler method
008820	The Grid now automatically expands a node during the drag-n-drop, if the drag hovers over the closed node in the tree. This allows the user to open a node in the tree to drop at a lower level, while dragging.
008821	The folder path set by invocation of vault.setWorkingDir() is now used when the vault.selectFile() opens a Windows File Browser window.
008838	Added "Scroll as you drag" feature to grid
008854	Support of css properties added to the CGrid

Program Management

Issue #	Description
008747	% completion graphics are enabled in Gantt Chart
008861	Database patches have been provided as part of the solutions upgrade process to clean up items in Aras Innovator that may have changed during the upgrade of Program Management. Please reference Section 3 "Upgrading from Previous Releases" and the <i>Aras Innovator - Upgrade Package</i> for applying this fix
008904	Activity2Assignments can be copied from a Project Template

Product Engineering

Issue #	Description
008088	Part Goal rollup calculations will detect infinite loops in the BOM structure
008731	Values for part cost can use decimal format that can be customized
008792	Part Goal rollup calculation performance greatly improved
008808	A new action has been added to the Part Item Type which will recalculate the Part Goals for all Parts in the database.
008860	Database patches have been provided as part of the solutions upgrade process to



	clean up items in Aras Innovator that may have changed during the upgrade of Product Engineering. Please reference Section 3 "Upgrading from Previous Releases" and the <i>Aras Innovator - Upgrade Package</i> for applying this fix.
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Quality Planning

Issue #	Description
008696	Fixed the display of the Effects cell in the grid after deleting the contents.

4.2.3 Known outstanding issues in 8.1

Framework

Issue #	Description	Workaround
006830	Cannot change a text property from "not required" to "required".	A workaround has been provided in the on-line help of Innovator.
007281	Vault server cannot resolve host name	The vault URL computed by Innovator can fail to calculate based on DNS settings. If you encounter a problem resolving the vault URL, please contact Aras support.
008185	On-line help is incomplete	Not all new features in Aras Innovator have been documented in the on-line help section of Innovator. Please contact Aras support if you are having difficulty with a new feature.
009017	Versioning does not work without a Life Cycle Map	Set a default life cycle for all versionable items.

Program Management

Issue #	Description	Workaround
008868	Milestones without Predecessors will display Start Date and Finish Date the day before the Planned Start of the project	
008990	Percent Complete of WBS element is "0" when Activities are completed	WBS elements will display the % complete based off of the Activities/Milestones with work estimates only, and will ignore Activity/Milestones without any work estimates.
008993	Email notifications are only sent to the Activity Leader	
008994	Percent Complete of Activity is "0" when activity is complete, but there is no work estimate	Activities that do not have a work estimate set for each assignment cannot calculate the percentage of work completed, because this % complete represents the percent of the work estimated that has been completed. This also Include the calculation of % complete for Milestones.

Quality Planning

Issue #	Description	Workaround
007624	Characteristic browser out of sync	The workaround for the problem is to open a



	with displayed value when QP document promoted from Baseline to In Work state	characteristic browser and select a latest version of a characteristic, if desired. This should be done individually for each line in each document which got out of sync due to the versioning of a characteristic(s).
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4.3 Version 8.0

Aras Innovator 8.0 is a major release whose primary objective is to implement license manager support for unlimited user access. This release also introduces some enhancements to the Aras Innovator Enterprise Application Framework and the Solutions.

4.3.1 Enhancements in 8.0

4.3.1.1 Technology

- Aras Innovator client is supported in .Net framework 2.0 and .Net Framework 1.1
- Aras Innovator server is supported in .Net framework 2.0 and .Net Framework 1.1
- Aras Innovator now supports the use of Microsoft SQL Server 2005

4.3.1.2 Enterprise Application Framework

- Configurable Grid
 - Ability to copy a row from within an instance of a configurable grid and paste it into the same instance of the configurable grid.
- Searching
 - The user is now able to abort a search request that is in the process of execution using the new Stop Search button in the search toolbar.
 - Ability to hide columns from the search grid on an individual basis.
 - Significantly increased performance when searching for versionable Item Types.
- Usability
 - User Preferences are now stored as an Item Type in the database and not as an XML file on the client. Allowing preferences to be shared over separate client Machines.
 - Saves User Query Preference on an individual user basis for each Item Type.
 - Each user has the ability to re-set their preferences to the default preference at any time.
 - Default preferences can be modified by the Aras Innovator Administrator.
 - Notification of unsaved Items and open Windows upon system exit.
 - Ability to designate form view specifically based on adding an item.
 - Support for the use of a third button scroll wheel on a mouse.



- Ability to set priority for Item Views.
- Ability to assign Item Views by Identities.
- Ability to designate Item Type singular and plural labels in addition to name.
- Expand All/Collapse All in the Structure Browser now included to enable users to expand the entire structure or to collapse the structure to the root node.
- Administration
 - A series of Administrator reports has been added to assist in system management.
 - Added an Active Session view.
 - Ability to set the owned_by_id, managed_by_id, and classification properties to required.
- Classification
 - Ability to define and build a specific form layout for each node within an Item Type's classification structure.
 - Ability to view classification structure from read-only form.
 - The tree that is displayed when selecting a classification for an Item Type will include an icon of the Item Type that the classification tree represents.
- API
 - Significant improvements to the API for managing .NET client controls.
 - Supports multiple methods for a single event.
 - Enhanced Filtered Search Browser.
 - New SQL Item Type for managing SQL in Aras Innovator.
 - New Form Event "onReload", which is used whenever the client loads new AML from the server into the form.
- Configuration Management
 - Ability to filter for the latest released version of a versionable Item.
 - Ability to filter based on effectivity of versionable Item.
 - Life Cycle support for effectivity.
- Workflow
 - Improved workflow looping capabilities.
 - Dynamic Activity assignment.
- Installation/Configuration
 - Ability to update previous release to current release.
 - Ability to upgrade core or solutions database.
 - Ability to add solutions to a core database.
 - Release variables are updated on upgrade.
 - Installer allows upgrades to existing installation.



4.3.1.3 Program Management

- Email notification for Project Activities.
- Customizable status colors based on configurable business rules.
- Customizable Project grid layout.
- Filtering of Project Activities within the Project grid.
- New Business Calendar functionality allowing custom configuration of holidays used in scheduling.

4.3.1.4 Product Engineering

- Improved synchronization of form fields after a save.
- Better searching and linking features for Affected Items.
- Consistent display of class-specific fields on a form or tab.
- Improved the Design-to-Goal functionality to update more frequently and efficiently.
- Enhanced formatting for standard reports.

4.3.1.5 Quality Planning

- Introduced type-ahead functionality within bound select fields.
- Improved synchronization while editing FMEAs.
- Improved copy/paste support.

4.3.2 Issues Fixed in 8.0

Framework

Issue #	Description
008278	Added support for the Unlimited license type.
008545	Added the ability for the administrator to control the default User preferences from the World preference. If a user has not logged in before, or has their preferences reset, then the World preferences will be used as a template.
008577	Fixed the behavior of Filtered Item Browsing when there are properties of type Item with the same data source defined on an Item Type.
008619	Aras Innovator Installer was enhanced to support new licensing and distribution policies.
008624	Improved performance of a query for large numbers of versioned items.
008633	Fixed the behavior of looping between activities repeatedly in the same Workflow Process.
008655	Created public API for .NET UI controls.
008692	Added .NET Controls API Reference to the help menu options for Aras Innovator administrators.
008718	Fixed export of versionable items for Solutions Upgrade Tool

Program Management

Issue #	Description
008265	Improved the performance of the creation of a Project
008715	Database patches have been provided as part of the solutions upgrade process to clean up items in Aras Innovator that may have been left behind during previous



	upgrades of Program Management. Please reference Section 3 "Upgrading from Previous Releases" and the <i>Aras Innovator - Upgrade Package</i> for applying this fix.
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Product Engineering

Issue #	Description
008568	Improved the performance of rollup calculations for cost goals.
008714	PR Affected Items not properly migrated – Databases that had existing PR's migrated during upgrade from 7.1 to 7.2 may not have all affected items mapped to the Poly Item property correctly. A database patch has been provided as part of the solutions upgrade process. Please reference Section 3 "Upgrading from Previous Releases" and the <i>Aras Innovator - Upgrade Package</i> for applying this fix.
008715	Database patches have been provided as part of the solutions upgrade process to clean up items in Aras Innovator that may have been left behind during previous upgrades of Product Engineering. Please reference Section 3 "Upgrading from Previous Releases" and the <i>Aras Innovator - Upgrade Package</i> for applying this fix.

Quality Planning

Issue #	Description
007300	Characteristic browser "Apply-to-All" fixed for Tolerance
008613	Fixed filtering of APQP Libraries based on the FMEA type, Design or Process.
008715	Database patches have been provided as part of the solutions upgrade process to clean up items in Aras Innovator that may have been left behind during previous upgrades of Quality Planning. Please reference Section 3 "Upgrading from Previous Releases" and the <i>Aras Innovator - Upgrade Package</i> for applying this fix.

4.3.3 Known outstanding issues in 8.0

Framework

Issue #	Description	Workaround
007281	Vault server cannot resolve host name	The vault URL computed by Innovator can fail to calculate based on DNS settings. If you encounter a problem resolving the vault URL, please contact Aras support.
008185	On-line help is incomplete	Not all new features in Aras Innovator 8.0 have been documented in the on-line help section of Innovator. Please contact Aras support if you are having difficulty with a new feature.
008750	New images added to an image cell in a configurable grid will not be discarded from the display if the grid is unlocked without save.	You must reload the form to discard the image from the display. Note that this is only when adding a new image, and not when replacing an existing image. Unsaved changes to existing Image cells will be discarded. This affects display only.
008773	Deleting assignments from the Workflow Process form for an item fails to refresh.	After deleting the assignment, save the workflow process and reload the form. The change is committed to the server.
006830	Cannot change a text property from "not required" to "required".	A workaround has been provided in the on-line help of Innovator.

Program Management

Issue #	Description	Workaround
008747	% completion graphics are disabled in Gantt Chart	





Product Engineering

Issue #	Description	Workaround
008731	The new SQL rollup calculation for part cost can display as a precision value. For example, a Calculated cost of 228.79 could display as 228.79000000000002.	

Quality Planning

Issue #	Description	Workaround
007624	Characteristic browser out of sync with displayed value when QP document promoted from Baseline to In Work state	The workaround for the problem is to open a characteristic browser and select a latest version of a characteristic, if desired. This should be done individually for each line in each document which got out of sync due to the versioning of a characteristic(s).
008696	Deleting the contents of the Effects cell from the grid can leave the effects cell displayed in highlight mode even after selecting a different cell.	This is a display issue only. The form will reload correctly the next time it is opened.

