



**Factory Scheduling Solution 2023.1
Release Notes**

Factory Scheduling Solution 2023.1

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1 What's New?

This section comprehensively documents and details all of the new features and improvements that have been added in this release.

The GA of August consists of an all-encompassing bundle with a primary focus on security, which also includes updates to third-party security patches.

It is important to note that it will be MANDATORY to update the Web Scheduling Solution 2023 with this General Available release before installing any future patches.

With this update, we cannot guarantee that any project customizations will continue to function if they are directly linked to third-parties. If you have any doubts or need further information, please refer to our Customer Service.

NOTE: All endpoints (except for Configuration Manager's) and all connections to database saved in the "appsettings.json" and "appsettings.config" files have been automatically migrated and will be managed by Configuration Manager. In order to improve performance and management of all endpoints and all connections to database, it is recommended to remove them from Company Chart and add them to Configuration Manager.

1.1 MOM

1.1.1 Factory Scheduling

[#37229: Stock Trend buckets: configurability](#)

Introducing the possibility of configuring the bucket interval (e.g., week, month).

[#41061: Drag and Drop Inside Resource Gantt Grid](#)

It is now possible to drag and drop productions in the Grid portion of the Resource Gantt to change the sequence in production, thus improving the usability of the widget.

[Add production on child layer](#)

Introducing in the Production Gantt the possibility to directly create a production as a child of the selected production.

[Compact left & Add production in Resource Gantt](#)

Introducing the possibility to compact the production plan left and to add a scheduled production also from the Resource Gantt (in addition to the Production Gantt), thus allowing more flexibility in managing different levels of analysis in Production Gantt and Resource Gantt.

[Edit efficiency of a scheduled production](#)

It is now possible to edit the efficiency of a scheduled production directly in the "Activity Details" popup.

[Manage parallel operations using key2make](#)

It is now possible to manage parallel operations when using key2make as automatic scheduling algorithm.

[Pluggability of custom scheduling algorithm](#)

Standardizing the capability to register and launch any automatic scheduling algorithm embedded in Factory Scheduling.

[Use of frozen period's end date in key2make integration](#)

Extending the settings for the key2make scheduling algorithm with the frozen period's end date.

[Send a notification after Save](#)

Introducing a notification to Notification Engine after saving the production plan, so to allow the implementation of a custom logic in post-processing.

[Configuration of pipes/tanks without tools](#)

No longer requiring the creation of a tool when configuring pipes and tanks connection.

1.2 Common

1.2.1 ACM

[Adding reveal password button](#)

Added the reveal password button in login and change password screens to show/hide the user-inserted passwords.

When the user clicks the password reveal button to turn it on, the password text is revealed, and the eye icon changes to have a slash over it.

1.2.2 Base Services

1.2.2.1 Bricks

[Bulk data insert from Excel file](#)

Providing a new option for bulk data import from Excel file in the standard data edit configurations.

The feature will be available, as other data actions, in entity and widgets included in dashboards and Control Tower.

[List all widgets based on a specific entity](#)

Introducing the capability to view a list of all widgets configured with a specific entity as their datasource, and providing the administrator user with an option to delete them.

[Import/export boards](#)

Providing the administrator user with the capability to import/export boards with all their related dashboards, widgets and datasources, in order to make it easier to share configurations with different environments.

[Manage "Delete all" button visibility](#)

Introducing a new option in entity configuration to manage visibility of the "Delete all" button.

[New user role for Control Tower's customization](#)

Providing a new user role that allows the end-user to customize the layout and add widgets to their own Control Tower.

[Manage "Update all" button visibility](#)

Introducing a new option in entity configuration to manage visibility of the "Update all" button, which is also being moved to the toolbar as the other action buttons.

[New "Map" widget](#)

Introducing a new "Map" widget type for showing interactive maps with markers, allowing the display of useful KPIs and information.

[Set default datasource parameters in editing form](#)

Possibility to set the datasource parameters as default value inside the standard editing form.

[Publish multiple boards per Company Chart node](#)

In an attempt to simplify the structure of the Company Chart and the management of Control Towers, the user is enabled to publish multiple boards (i.e., Control Towers) under the same Company Chart node.

[Wizard for defining decoration rules and calculated fields](#)

Providing a wizard interface to simplify the definition of calculated fields' and decoration rules' expressions.

1.2.2.2 Notification Engine

[Additional Input conditional execution](#)

Possibility to define a condition when configuring an additional input inside an operation. In this way, at runtime, the additional input will be executed only if the condition is verified, otherwise it will be skipped.

[SSL certification Expiration notification](#)

Added a new operation that automatically checks the expiration date of the SSL certificate used by our products and, some days before expiration, sends a notification to IT in order to start the certification update procedure.

[Synchronous Web Service Support](#)

Added the possibility to configure a SOAP connector as a synchronous web service when used as input inside an operation. This means that the SOAP connector waits for the operation to be completed before responding to the client.

1.2.2.3 Procedure Launcher

[Introducing execution log viewer](#)

Introducing a log viewer that enables user to browse logs of executed procedures in a dedicated screen.

1.2.3 Core

[#43422: Improving data filtering and wiring](#)

A number of improvements have been made to the way the Layout Manager presentation engine handles OData query requests to support a greater amount of filter conditions.

[Integrating with Azure Application Insights](#)

Azure Application Insights (App Insights) provides monitoring and alerting capabilities that can be leveraged to monitor the health of web applications. By turning on this integration, it is so possible to gather performance metrics, detect anomalies and send tracing data to Application Insights for analysis and visualization.

[Update third-party libraries](#)

Updating client and server third-party libraries for fixing bugs, performance issues, and security vulnerabilities.

[Gantt multiple selection of adjacent activities](#)

It is now possible to select multiple adjacent activities (i.e., that are in the same row) at once using the SHIFT key. As an example, the user can click the first activity, press the SHIFT key and hold it, then click the last item and release the SHIFT key.

[Changes in mobile theme](#)

The style of mobile components has been redesigned to improve user experience and the global look and feel of operator pages.

[Retain Gantt selection after refresh](#)

Adding persistence of Gantt selections, applied filters, wirings and selected tabs after a Layout Manager reload.

NOTE: Currently enabled only by Resource & Supply Planning.

[Introducing new Grid container in Layout Manager](#)

Layout Manager now provides a brand-new Grid container that supports multi-column and multi-row layout. By combining Gridsters with Tabs and Splitters, it is now possible to design very complex dashboard layouts in an easy and intuitive manner.

[Show filter info in detail widget](#)

Master-detail layouts will be enhanced by highlighting the wiring conditions that filter a data-driven widget.

For example, when a cell of a master pivot table is selected and, consequently, its detail grid displays the items associated to such cell, the information regarding which cell has been selected will be displayed over the detail grid.

[Improvements in analyzing and comparing KPIs achieved by different simulations](#)

To obtain more meaningful and effective analysis and comparisons, simulation tiles have been deeply redesigned and extended with the following additional functionalities:

- Fully reviewed simulation tile editor to build intuitive draggable layout from available KPIs spanning multiple columns;
- New auto-layout feature to automatically arrange KPIs in tiles;
- Brand new available tile geometry (i.e., rectangular) to better fit KPIs in tile in some use cases;
- Zoom layout to display more KPIs when the tile goes full-screen, shipped with a dedicated editor;
- New grouping feature that brings a new way to freely organize KPIs to improve their visualization and comparison;
- New hide/show options in comparing simulations pop-up to restrict visibility of available KPIs.

[Data model extension for Dynamic Form widgets](#)

Datasource Data are now available inside Dynamic Form Widget to be used as form fields default value.

[Introducing Gantt compact mode](#)

Introducing a compact version of the Gantt widget that shows activities on only one row (currently two rows are always used for activity box).

This behavior could be set at configuration time (Bricks) or dynamically with a toggle button in the widget toolbar.

[Centralized Logging configuration](#)

Logging settings of web applications have been moved from the file system to the new Configuration Service. Thus, system administrators can easily control and change logging options in a centralized web tool, without having to deal with sparse files on multiple servers.

Pivot user configuration enhancements

Unlike previous versions, the Pivot now allows a user to save different options without overwriting the entire configuration each time. In fact, it is now possible to save the following settings separately from each other, by using a dedicated configuration menu:

- User Settings → rows, columns, report filters, visible data in pivot, calculated fields, aggregation formulas;
- Format Settings → configuration of cell formatting properties (decimal digits, thousands separator, currency symbol, etc.);
- Filters Settings → creation, saving and deletion of pre-set filters, set of the default filter and organization of items visible in the filter menu;
- Chart Settings → set of the default layout type (grid, column, pie, etc.) to be used for data display, organization of items visible in the layout menu;
- View Settings → set of the default display mode (classic, compact, flat), organization of items visible in the display mode menu.

Introducing server-side export to Excel

Added a new option to export the entire dataset of a widget to Excel in an optimized manner that is performed on the server side.

2 Bug Fixes

This list covers all the bug fixing done since the previous release until GA of August.

The sorting within each chapter is in descending order, meaning from the latest released patch to the official version.

The first column indicates the patch number (version 11.23.3.0 is the officially released version), the second column indicates the AskMe number (if present), and the third is the bug description.

2.1 Installer

Patch number	AskMe ID	Description
11.23.3.5		DbUpdate = Condition.
11.23.3.4		Add Digital Signature.
		Add Disable Ciphers Triple DES 168.
11.23.3.3		The actions of CompanyChart in state.dat when create in Maintenance Mode.
11.23.3.2		SQL Server database owner issue when user has <code>sysadmin</code> role.
11.23.3.1		Timeout upload configurations (Company Chart).
		Empty ACM and Company Chart endpoints in resume state.

2.2 MOM

2.2.1 Factory Scheduling

Patch number	AskMe ID	Description
11.23.3.52	#75764	After Total import, when you run schedule, it is giving error and operations are not scheduled.
11.23.3.51	#60371	Material trend values error.
	#68045	Calculation of SetupTime with Startup-Progress is wrong (StartupTime progress is reduced twice).
	#68353	Incorrect display of material trend widget.
	#74638	Error loading Carichi.dll.
11.23.3.50	#76185	Scheduling service not starting due to wrong Oracle.ManagedDataAccess version reference.
11.23.3.49		Implementation: Security enhancement.
11.23.3.48	#66940 - #68192	Error in creating a downtime on plant.
	#69031	Implementation: Add Material Code and Version info in SedLink class.
	#69308	Error in loading SED DLL multiple times.
	#69382	Explosion analysis - error applying filters in export to Excel.
11.23.3.47	#63283	Error in creating a downtime with end time set to 11:59 PM.
	#68728	Error in overriding orders - An item with the same key has already been added. NOTE: This patch requires the update of ShiftBook. See PreRequisites section for additional information.
11.23.3.46	#58481	Orders closed after scheduling start date are not schedulable.

Patch number	AskMe ID	Description
		NOTE: optimize execution of the views.
	#62645	After moving an WO to a resource not in cycle, the save does not create the relation for related orders. NOTE: added save of related orders also if parent order are in cycle but combined ones are not.
	#68228	Orders closed after scheduling start date are not schedulable.
	#69166	Setting Italian language the values for order status on fishing pond are not translated and then cannot be filtered.
11.23.3.45	#58152	Performance improvements in loading closed phases.
	#62645	After moving a work order to a resource not in cycle, saving does not create the relation for related orders.
	#64184	FactoryCalendar closing days not displayed in the scheduler.
	#68244	Error after locking resources.
11.23.3.43	#58481	Orders closed after scheduling start date are not schedulable. ***IMPORTANT*** Update the value of parameter "LoadOnlySchedulableOrders" in table S_APP_GLOBAL_SETTINGS from 'false' to 'true'.
11.23.3.42	#60564	Bucket Grid display problems.
	#64359	Resource Grid sequencing issues.
11.23.3.41	#41209	Filter on calculated fields.
	#61866	Phases not present in the scheduler.
	#63496	Joined field filter not working on Fishing Pond.
	#64345	Using the cart (cut/paste phase) the moved order remains unselected.
11.23.3.40	#62040	Export to Excel from explosion widget.

Patch number	AskMe ID	Description
	#62519	Error on finished phases scheduled
	#64322	Scheduler error during the split by duration phase of a Work Order scheduled on the Project Production Gantt.
	#64598	Error popup after unlock without orders blocked by user.
	#64663	Error moving order fixed by date if moved to another resource.
11.23.3.39	#64728	Error scheduling orders with linked orders and activation quantity set.
11.23.3.38	#64638	Pagination error on Fishing Pond.
	#58481	Orders closed after scheduling initial date won't be scheduled.
	#61725	Fishing pond with grouping - lost focus if user select an order on Production Gantt.
11.23.3.37	#62166	Factory Scheduling shows that a work order is partially scheduled, even though the work order quantity and scheduled quantity are the same. NOTE: Use the "MissingMaterialTolerance" parameter in the configuration service files to set the tolerance used to calculate the partially or over scheduled status.
	#63832	Error on unlock.
11.23.3.36	#63647	Gantt OPV in INTERACTIVE MODE does not work properly.
11.23.3.35	#55562	"Resource Gantt" and "Grid" widgets - add KpiOrderPickIntegr KPI.
11.23.3.34	#61814	Performance issue when launching SED in Interactive Mode - update performance in Lock resources.
	#56862	Filter on Production Gantt problem.
11.23.3.33	#57681	Material warnings in interactive mode updated only after moving consuming operation.

Patch number	AskMe ID	Description
	#57983	Calculation of SetupTime with Startup-Progress is wrong (StartupTime progress is reduced twice)
	#59236	Order overview gives an error. NOTE: alternative with TempoLavorazione = 0 are not acceptable and will be discarded during initial data loading. A new log is added with this message: "Invalid working time ({1}) for {0}: record not loaded."
11.23.3.32	#61814	Performance issue when launching SED in Interactive Mode.
11.23.3.31	#61909	Management machine efficiency parameter. NOTE: You have to configure new parameter in S_APP_GLOBAL_SETTINGS with key RESA_SULLE_MACCHINE and value 1 or 2 depends on your needs. 0 -> do not use machine efficiency. 1 -> use machine efficiency for working time, startup and setup 2 -> use machine efficiency for working time
11.23.3.30	#53878	Assigned column description shown at the wrong column.
	#55380	Bug filter on Mold trend.
	#56862	Bug filter on Production Gantt.
	#56868	Bug filter on Fishing pond.
	#60051	Bug filter on Mold trend.
	#60130	Bug filter on Order Gantt.
	#60132	Error on Mold Report.
11.23.3.29	#53892	New ODATA KPI.
	#55055	New ODATA KPI.
	#58654	Error managing phases with TIPO_RECORD = C

Patch number	AskMe ID	Description
	#59009	Error managing orders on resources not in any cycle.
11.23.3.26	#53892	New ODATA KPI.
	#55055	New ODATA KPI.
	#58481	<p>Orders closed after scheduling start date are not scheduled.</p> <p>Release Note:</p> <p>Added the new parameter <code>SCHED_FASI_FINITE</code> on <code>S_APP_GLOBAL_SETTINGS</code> table.</p> <p>Default value is set as <code>SCHED_FASI_FINITE</code> on <code>CONF_MOD</code> if present or 0 otherwise.</p> <p>We suggest to keep this value set to 0 if scheduling completed phases is not required for performance issues.</p> <p>Setting this parameter to 1 means modifying the filter applied to work order table during the data loading phase as follows:</p> <pre>SCHED_FASI_FINITE=0: DL.SOSPESO = 0 AND ODL.ODL_SEL = 2 AND ODL.TIPO < 5; SCHED_FASI_FINITE=1: read from ORDINI_FASI_CONS with filter ODL.SOSPESO = 0 AND ((ODL.ODL_SEL = 2 AND TIPO < 5) OR (TIPO = 5 AND ORDINI_FASI_CONS.DATA_ORA_ULTIMO_AVANZ_M>= StartSched));</pre>
11.23.3.25		Fix error on buttons in grid toolbar.
11.23.3.24	#59461	Error on logout/login.
11.23.3.23	#58174	Blocking issue at logout with automatic unlock enabled.
11.23.3.22	#58483	<p>Resource grid- cut and paste on different resources does not work.</p> <p>NOTE: In order to properly use the resource grid, remember to apply overrides, otherwise changes are not applied and the automatic scheduling algorithm will schedule again with old existing overrides.</p>

Patch number	AskMe ID	Description
		<p>In the event that, for whatever reason, it is not possible to schedule productions (WO3 with priority 30) having overrides, for example:</p> <p>WO1 - priority 10</p> <p>WO2 - priority 20</p> <p>WO4 - priority 40</p> <p>Any subsequent priority overrides will override the priority for the currently scheduled overrides, but the old overrides for those productions not currently scheduled will be retained at the same time.</p>
11.23.3.21	#55193	Error on Resource Gantt.
	#55950	Error on commit simulation.
	#58589	Missing refresh of Resource Gantt after selecting item in Production Gantt.
11.23.3.20	#55756	Pagination problem on bucket grid.
	#56646	Error in Production Gantt creating a join in data source.
	#57077	Error in Wiring to Order Gantt.
	#57199	Error in Production Gantt creating a join in data source.
	#57888	Error in Production Gantt creating a join in data source.
	#58024	After cut and paste of a phase in the Resource Gantt, the focus will be lost.
11.23.3.19	#58105	<p>Error in Production Gantt creating a join in data source.</p> <p>NOTE: Before adding a join to any gantt, make sure that the value of the ResourceNameColumnName field in the json configuration file stored in the DataSource folder of the CompanyChart is correctly populated.</p> <p>If this field is blank, when adding the join the corresponding ResourceNameColumnIndex field in the same file will not be correctly updated.</p>
	#55746	Failure to maintain overrides on alternatives.

Patch number	AskMe ID	Description
11.23.3.18	#55180	OData scheduler "ScheduledProductionBucketOData" does not recognize orders in some buckets.
	#55344	Implementation: New widget Resource Grid with improvement in performances. NOTE: Since Bricks does not fully manage the new configuration yet, if you edit the widget configuration with Bricks - Advanced Configuration, you have to check in Company Chart that all settings are correctly saved, in particular, check the "VirtualScrolling" flag in GraphSettings/ResourceGrid_Default.json
	#57139	Overrides not loaded for operations starting before scheduling Horizon.
	#57379	ICT crashes with intervalRange parameter equals to 5.
11.23.3.17	#53348	Missing orders after overrides.
	#54577	Scheduling in establishment calendar holidays.
	#55685	Implementation: Allow definition of downtime and overtime variations from not leaf equipment.
	#56909	Missing orders overrides.
	#56998	Missing orders overrides.
	#57139	Overrides not loaded for operations starting before scheduling Horizon.
11.23.3.16		Fix known issues on Load Reports.
11.23.3.15	#56155	Error on reloadAfterAutoSchedule set to true.
11.23.3.14	#54385	Bricks Plug-ins do not work on Scheduler. Implement: Loads report migration to dedicated widgets (see attached <i>Factory_Scheduling_UserManual.pdf</i> for details).
	#55592	Error committing the production plan.
11.23.3.13	#53583	Error on Purchase Orders.

Patch number	AskMe ID	Description
	#53377	Error on Purchase Orders.
	#53969	Purchase Orders not available any more after upgrading from V2021UP2 to V2023.
	#54590	Fishing pond does not refresh automatically.
	#54817	Resource Gantt does not refresh.
	#54901	Error on commit after migration on 2023.
	#55055	Error on Supplier orders.
	#55321	Scheduling phases preceding finished phases.
		Production plan loading problem.
11.23.3.12	#5368	It is not possible to show custom values on production gantt.
		Some posted production (black rectangle) are displayed in the gantt on the right of now.
		Impossible to change Sequence after time horizon.
11.23.3.11	#52715	Over scheduled and missing material.
	#53273	Production Gantt empty for not locked resources.
	#53688	It is not possible to change color in Gantt decoration rules.
	#54426	Production gantt empty for not locked resources.
	#54461	Saving activity details, the resource gantt lose the focus on selected production.
	#54475	Setting priority on a large set of phases will make interface in an inconsistent state.
	#54482	Production gantt empty for not locked resources.
		Error 500 if user tries to drop a production before or after a downtime.

Patch number	AskMe ID	Description
		Resource Gantt reorder rows error management.
11.23.3.10		Impossible to copy the work order code in the grid near the Resource Gantt.
11.23.3.9	#53486	Performance issue on drag&drop in Resource Gantt grid.
	#53662	Cut and Paste on non-alternative resource to cycle does not work.
	#54011	Resource Gantt shown blank if at startup it is closed.
		Resource Calendar does not force SED init.
11.23.3.8	#48814	Overrides are not saved.
	#51421	Dynamic constraint grid on Web Scheduler .
		Blocked final balances cannot be set in heuristics. NOTE: the parameter "Collected operations locked on sequence" works ONLY if "priorities management" is set to 2
11.23.3.7	#53298	Errors enabling copy/paste buttons.
11.23.3.6	#49887	Fishing Pond pagination issues.
	#52696	Export to Excel not working.
	#52715	Over scheduled e missing material after login.
11.23.3.5	#52999	Error in enabling on copy/paste buttons in Production Gantt.
	#53061	Paste button paste a production as last one
11.23.3.4	#51811	Performance- Refresh Fishing Pond\Production Gantt.
11.23.3.3	#51423	Error opening scheduler when postedQuantity is null.
		New Material Trend widget.
11.23.3.2	#51010	Bad performance on Production Gantt.

Patch number	AskMe ID	Description
	#51250	Suspended phases no more schedulable.
	#51294	Commit fails with error ORA 01795.
	#51295	Automatic scheduling fails with error Unauthorized
	#51811	Bad performance on Production Gantt.
	#51812	Save and commit does not show loading pop-up.
11.23.3.1	#39674	Order Position Custom Attribute not considered.
	#40883	Sporadic Issues Loading GUI of Production and Resource Gantt.
	#41538	Performance ScheduledProductionBucketOData.
	#41539	Scheduled production's duration is wrong upon moving downtime.
	#45543	Scheduler service stopped abnormally.
	#45904	Activity details - Date custom fields show 1970 instead of empty.
	#47876	Performance refresh after plan changes.
	#48783	Activity Details - Sub-phase Selection number on widget.
	#48804	Sorting in the fishing pond resets the horizontal scroll position.
	#49606	Building - Production Gantt empty if you select a day in the calendar.
	#49704	Curing - Modify end time with multiediting and Activity Details.
	#49732	Add new activity: if remove check on start automatically, the new production move the current one.
#49942	Bug on Moving Scheduled Production.	

Patch number	AskMe ID	Description
	#50188	Bug on custom interfaces.
	#51010	Bad performance on Production Gantt.
11.23.3.0	#38668	Copying a phase of a production with a sub-phase set, the new production will be map on a different phase.
	#41739	The column <code>RISORSA_PREVISTA</code> in <code>ALLOCAZIONI</code> table is not populated.
	#43976	Bad performance loading simulation data and downtime.
	#44015	Batch allocated consumption shows not expected data in Inventory Trend.
	#44702	The login phase, opening a simulation and Lock/Unlock functions have bad performance.
	#44877	Machine override not refreshed when moving order to new machine.
	#44877	Data deleted from <code>FASI_PRIORITA</code> when inserting a record in <code>ORDINI_FASI_CONS</code> on non-routing resource.
	#46101	The "View Navigation" icon in the toolbar is not visible.
	#46103	Issue English localization in "Select Productions" drop-down menu.
	#46106	The icons at the top of the "Building" page a have wrong tooltip.
	#46108	In "Building" and "Curing" pages, there are some wrong filters.
	#46111	The "missing material filter" button is missing in the "Add Production" pop-up window.
	#46388	Material Overview - Buttons have a wrong behavior.
	#48142	In the implosion analysis report, the BOM of the selected material is not visible using k2m algorithm.
#48297	It's not possible to invoke MRP for a single part.	

Patch number	AskMe ID	Description
	#48772	In the "Curing" page, material overview, some rows are duplicated.
	#48871	Missing material in automatic mode.
	#48983	Building - Wrong behavior of machine filter button in ICT.

2.3 O.S.A.

2.3.1 Analytics

Patch number	AskMe ID	Description
11.23.3.7	#321212 - #78266	It is not possible to retrieve ACM usercontext parameter value.
11.23.3.6		Implementation: Security enhancement.
11.23.3.5	#71855	PDF report does not word after update to 2023 suite.
11.23.3.4	#64119	Unable to Logout of Analytics if a user with no License logs in. No other user is able to login.
11.23.3.3	#53696 - #59312	It is not possible to export Flex Pivot widget to Excel.
11.23.3.2	#51169	Analytics Andon open new tab after refresh.
11.23.3.1	#45424	Decoration rules does not work with fixed columns.

2.4 X3

2.4.1 X3 Interface

AskMe ID	Description
#51621	Incorrect mapping for UoM in GraphQL interface.
#52072	Incorrect relationship between parent and child order for GraphQL when using assignment rules.
#53140	Configuration issue when upgrading from 2022 to 2023 with GraphQL.
#53409	GraphQL Work Order Duration is not the correct unit of measure.
#57568	The interface has always added the material ID to the material version. In the new GraphQL this creates some confusion and issues as the version is now '1'. Showing IDs that seem incorrect to the end user.
#59929	GraphQL connector total import fails to import work order even if successful message is displayed. Note: The latest patch ensures that it is no longer possible to have a situation where the imported materials are not all those produced or consumed by work orders. The only exception is the transition to the Material Service model without a full DB migration, which is an installation/configuration error, not a bug.
#60047	Matrix setup time is wrongly calculated both with JSON and API connectors.
#61814	Performance issue when launching SED in Interactive Mode - update performance in Lock resources.
#62257	Number of resources from work order operation not used.
#62489	Total import using GraphQL gives error 'Cannot insert duplicate key in object 'dbo.MACCHINE'.
#63267	GraphQL export is failing with error 'mandatory property workCentre.manufacturingSite'.
#64445	GraphQL: When using GraphQL integration, run Total import give error 'Value cannot be null'.

AskMe ID	Description
#64699	GraphQL: When importing suggestions, get error 'Object reference not set to an instance of an object'.
#64794	GraphQL: For partially tracked work order, Quantity Posted and State Posted are not shown.
#64811	GraphQL: Unavailable periods range does not work.
#64817	GraphQL: Matrix setup times are all set to zero.
#64849	GraphQL: Replacement work centre does not work.
#64888	GraphQL: Work order custom fields are not updated.
#65318	GraphQL: When importing partial tracked operation, time tracked in Fishing pond is in seconds and in Activity details screen does not match.
#65448	Export is not sending datetime fields in correct format and operations are in reverse order.
#65581- #68711	GraphQL: When importing work orders , 'First material availability date (FDMA) ' is not imported or used during scheduling.
#71768	GraphQL: Work Center capacity variations and number of resources are not imported.
#74588	GraphQL: "Scheduled start" and "Scheduled End" dates are not updated.
#78266	Analytics does not working properly in V2023-Aug24-Patch.
#78609	When the 'Sage X3 Interface Graph QL' service is restarted, the resource table is deleted.
#78848	Web scheduling 2023.1.16 - Total import gives errors
#79455	Set up time is not calculating correctly.

2.5 Common

2.5.1 ACM

Patch number	AskMe ID	Description
11.23.3.6		Implementation: Security enhancement.
11.23.3.5		idsrv.session Cookie is not HTTP ONLY NOTE: Added the ForceHttpOnlyCookies setting that, when enabled, secures all application cookies by making them inaccessible to client-side scripts, strengthening defense against XSS attacks. Please note that this option cannot be turn on if Shop Floor Monitor is in use.
11.23.3.4		Implementation: Removed AngularJS: Due to its end-of-life status, AngularJS has been removed for enhanced security.
		Implementation: Updated jQuery UI: Upgraded to the latest stable version for improved performance and security.
11.23.3.3	#60794	With SAML login enabled, the temporary password function does not work.
11.23.3.2	#56561	Implementation: Restart ACM Web Manager after a failure to increase sedApta services resiliency.
11.23.3.1	#50551	Login with AD integration does not work.

2.5.2 Base Services

2.5.2.1 Bricks

Patch number	AskMe ID	Description
11.23.3.41	#57060 -	Memory leak.

Patch number	AskMe ID	Description
	#64382	
	#63589	Font size modification in BarLine does not work.
	#70152	Pivot export pdf does not work.
		Implementation: Security enhancement.
11.23.3.40	#68991	Pivot title parameter does not change after changing parameter value.
	#70761	Dashboard with slideshow does not refresh data after first load.
11.23.3.39	#69655 - #70167	Bricks and Entity Manager are not stable.
11.23.3.38	#49544 - #68535	Problem with Oracle DB and CRUD on data with apex.
11.23.3.37	#67931	Bad alignment grid column header.
11.23.3.36	#59663	Error pop-up appears when data source is empty in Pivot. Note: In order to enable this fix, a new Pivot setting "Show empty data" should be set.
	#66293 - #66509	Excel upload causes duplicate keys.
11.23.3.35	#54209 - #67129	Error filtering with "Does not contain" operator.
11.23.3.34	#67194	Error uploading .trdx report in Oracle DB.
	#67930	Error when visualizing data with string value.
11.23.3.33	#62973 - #64352 - #64833	Errors in viewing Bricks dashboards due to connection deadlocks with Entity Manager during a service restart.
11.23.3.32	#56735	Grid title in mobile mode is not visible.

Patch number	AskMe ID	Description
	#61134	Filter date problem when client and server in different timezone.
	#62056	Decorations missing when switching scenarios.
	#63642 - #67526	Dashboard parameter of type string is visualized as a date.
	#64239	Usability after Commit Changes e Refresh.
	#66425	Problem inserting data during import bulk.
	#66906	Problem Gantt with zoom. Note: To enable this fix #58819, a configurator user should now set the 'Zoom unit' property for each Gantt's scenario within the Settings panel.
11.23.3.30	#60549	Link not working in Sidebar Control Tower.
	#60913	Buttons on 2023 Bricks Filters: datetimestructure issue as layout manager filter.
	#64452	Error inserting data in Control Tower.
11.23.3.29	#62929	Libraries Products widgets on Control Tower are not visible.
11.23.3.28	#63097	Duplication of wiring parameters.
		Core-UI Implement: Avoid widget refreshing if contained in a collapsed splitter.
11.23.3.27	#61793	Editing inline needs double click to open grid cell. -> Important: To enable this fix, it is necessary to disable the new "Enable double click editing" option in the grid settings screen.
	#63098	Clicking outside the grid after editing, does not save updated value.
11.23.3.26	#59700	Wrong number of lines displayed.
	#61792	Custom action user notifications should be hidden automatically.

Patch number	AskMe ID	Description
11.23.3.25	#60324	Entity Form behavior misalignment between Control Tower and Dashboard.
	#61439	Export all to excel does not work.
11.23.3.24	#56216	Dashboard wiring between fields and drive-type parameters.
	#56706	Export and import of a datasource, all settings of editability are enabled.
	#59126	Grid scroll repositioning after commit.
11.23.3.23	#57905	Fixed columns work only in default scenario.
	#59597	Apostrophe problem in a drop down or grid filter.
	#60250	Parameters in titles are not resolved.
11.23.3.22	#58509	Error on saving to Company Chart.
	#59951	Performance navigation on Bricks.
	#60018	Export Excel on a grid with filters.
11.23.3.21	#57271	Grid and Tree Column Localization of values exported to Excel.
	#59917	Filters applied in scenarios different from Default.
11.23.3.20	#57300	Multi-selection editing - dynamic drill down not working.
	#58460	In a dashboard with multiple tabs, the application of global filters causes the refresh of all the tabs (even in the absence of wiring).
	#58479	Select * on Bricks grid with virtual scroll enabled.
	#58819	Instances of EM with a different name than the Bricks instance cannot access connections created with it. Note: To enable the fix #58819, you must now set the 'Bricks Instance' property for each Entity Manager instance in the Configuration Manager. Assign this property with the name of the related Bricks instance.

Patch number	AskMe ID	Description
	#59135	Reset filters does not work when virtual scrolling is enabled.
	#59450	Export on Excel does not work.
11.23.3.19	#58486	Update all button with virtual scroll enabled.
	#58600	Filter on columns for value not present in the first rows.
	#49895	Wrong version in info.
	#56596	Problems in editing in line and in forms.
11.23.3.18	#56646 - #57199 - #57888 - #58105	Join on the Production Gantt: the wiring between the Production Gantt and the other widgets is broken. -> NOTE: It is necessary to reselect the correct column for the "Resource name source column" field.
	#58361	Data sorting not working.
	#58400	Problems with grid totals with virtual scrolling.
11.23.3.17	#57797	Wiring between a paginated and not paginated grid is not working.
	#56523	Filter excel like on bricks.
	#57120	Error after update a field in a dashboard.
11.23.3.16		Error in update custom where parameter and column have the same Value.
		Dashboards export does not export drop-down in form.
		Implementation: Dashboards export does not export drop-down in form.
	#52283	Wirings between widgets contained in different grid container are not working.
11.23.3.15	#56025	TreeList generate error when displayed in board and freeze inside a CT.
	#56163	Date filter malfunction.

Patch number	AskMe ID	Description
	#56285 - #56677	Multiselection checkbox column is incorrectly displayed when there are frozen columns.
11.23.3.14	#53849	MOM-SOP Entities translations are not automatically uploaded.
	#54150	In a datasource editing with CRUD, if I enable the update on all, it doesn't work.
	#55959	Problem with editing a child widget that has a multivalued parameter.
		Core: Release pkg with core libraries - endpoint improvement.
11.23.3.13	#53702	Standard Dashboard Filters Error for Date in day-month-year format selected by the date time picker.
	#54788	Errors while importing data from Excel in an Oracle table that contains triggers.
		Andon opens a new tab after refreshing.
		Implementation: 3D Viewer Extensions.
		Implementation: Allow Bearer authentication in custom action execution.
11.23.3.12	#51182	Editable datasource with input parameter does not accept parameters during insertion.
	#54631	Excel extraction of Bricks report (work plan).
	#54794	Errors in datetime parameters when DB connections are taken from Configuration Service.
		Problem with Grid widget when using Parameter as default value.
11.23.3.11	#52253 - #54138	Entity Manager: Custom query failed to perform the update as intended.
	#52898	The Parameter inside the title by default doesn't show the default value.

Patch number	AskMe ID	Description
	#53703	Massive Dashboard export encountered issues while attempting to update the legend.
	#54265	Problem with Report editability.
	#54560	Bug on the date format.
11.23.3.10	#54108	Changes were lost in the pivot.
11.23.3.9	#52566	Errors during a multiple update of a field with default value.
	#54010	Company Chart: Saving multiple configurations with child reset enabled is too slow.
11.23.3.8	#51699	Unable to open pivot widget in Bricks when there are multiple values.
	#52944	Core: Export to excel ignores sorting conditions.
	#52994	In-line editing is not functional when an identity field is present.
		Implementation: Propagate User Request info to Custom Data source Plug-in.
11.23.3.6	#48621	Entity Manager: Problem with adding Cicli Tecnici records and modifying Bricks form.
	#49409	Incorrect display of {{Value}} in 3D widget pop-up causes confusion instead of displaying 0.
	#50767	Layout Filter Parameters mapped to an ACM Context Parameter defined with a default value does not properly work.
	#51407	"Select All" in Excel-like filter does not work as expected.
	#51631	Problem with publishing Dashboard on the Analyze tab of sedApta GO.
11.23.3.4	#51191	Data entry form grouped grids is not correctly working.
	#51675	Missing widget translations.

Patch number	AskMe ID	Description
	#51717	Entity Manager: The table ORDINI_FASI cannot be modified or changed.
		Implementation: keyboard doesn't work in mobile mode.
11.23.3.3	#50602	Entity Manager: Error with editing item when PK have IDs with spaces.
	#50857	Editing a field in a widget leads to the loss of visibility settings for all fields.
	#51012 - #51434	Controller loading failed in log in.
	#51548	Bookmark to dashboard are not working anymore.
	#51561	Save as action in widget configuration page is not working properly.
	#51638	Functional roles are ignored for CT visibility.
11.23.3.2	#44057	Error with resetting field value.
	#47668	Cannot filter columns that correspond to a number(1,0) oracle field.
	#50297	Custom action results in the opening of multiple pop-ups.
	#50775	Errors while opening a Control Tower.
	#50855	Cannot switch to desktop mode on hybrid screens.
	#50904	Grid wirings are not working where toolbar is hidden.
	#51048	API Button cannot be configured correctly if its payload or URL contain minus char (-).
	#51050	Recompiling custom actions with base 2023.3 libraries still results in errors.
		Error on accessing Bricks via advanced configuration.
	Installer: issue old file in Company Chart.	

Patch number	AskMe ID	Description
		Empty Breakdown Orders grid.
		Cannot read multi-instance library configuration.
		Problem with fields in the Map widget properties.
		Grid widget - Export All to Excel does not work.
		Dynamic Form Widget does not save changes.
		Map widget: connections disappear after editing tool tip properties.
		Connection tool tip issue: LeadTime, SupplyRatio always null.
		CT cannot see same widget in different Dashboard.

2.5.2.2 CDB

Patch number	AskMe ID	Description
11.23.3.2	#53313	Saving CDB into ROOT node is allowed. NOTE: The system should check and warn the user that saving into ROOT is not allowed.
11.23.3.1	#52641	Interactive Defines functionality leads to unexpected errors.

2.5.2.3 Company Chart

Patch number	AskMe ID	Description
11.23.3.10		Implementation: Updated Company Chart Client.

Patch number	AskMe ID	Description
11.23.3.9	#74422	It is impossible to add a user to the node if they are already present for another product in the same node.
11.23.3.8	#70885	Performance issue on DRP login - PROD environment.
11.23.3.7	#54521	Performance improvements to GetAllConfigurations API.
11.23.3.6		Restart Web Apps after failure.
11.23.3.5	#55043	Company Chart export includes nodes but excludes configurations.
11.23.3.4	#54781	Display issues in mobile mode.
11.23.3.3	#52399	User cannot log in if UNICODE characters are present in their display name.
		Issue on device touch.
11.23.3.2		localization files in en-GB folder are missing.
11.23.3.1		Issue on device touch.

2.5.2.4 Configuration Manager

2.5.2.4.1 ConfigurationService

Patch number	AskMe ID	Description
11.23.3.9		Implementation: Security enhancement.
11.23.3.4	#60831	Deadlock on connection task.
11.23.3.3		Azure connection in Awake defaults to true.
11.23.3.1		Restart Service and Web App after failure.

2.5.2.4.2 ConfigurationManager

Patch number	AskMe ID	Description
11.23.3.9		Implementation: Security enhancement.
11.23.3.4	#60831	Deadlock on connection task.
11.23.3.3		Azure connection in Awake defaults to true.

2.5.2.4.3 ConfigurationAgent

Patch number	AskMe ID	Description
11.23.3.9		Implementation: Security enhancement.
11.23.3.4	#60831	Deadlock on connection task.
11.23.3.3		Azure connection in Awake defaults to true.
11.23.3.2	#54970	CON files under user and system profile NicimClient folders are cleared by the agent.
	#60962	Wrong write of TNSNAME.ORA.

2.5.2.5 License

Patch number	AskMe ID	Description
11.23.3.6		Implementation: Security enhancement.
11.23.3.5	#71048	ProcAuto does not end.
11.23.3.4	#62675	Sometime PRL invokes NICIM PA with expired bearer token.

Patch number	AskMe ID	Description
11.23.3.3	#54687	External widgets created in Bricks does not work in Procedure Launcher LM.
11.23.3.2	#60060	Proc Launcher is currently obstructed.
11.23.3.1	#56863	Proc Launcher is currently obstructed.

2.5.2.6 Notification Engine

Patch number	AskMe ID	Description
11.23.3.5		Implementation: Security enhancement.
11.23.3.4	#71341	REST call does not manage Basic authentication.
11.23.3.3		Security issue on JQuery.
11.23.3.2		Service Log: impossible to enable Debug and Trace levels.
11.23.3.1		Mail connector - support Microsoft authentication.

2.5.2.7 Procedure Launcher

Patch number	AskMe ID	Description
11.23.3.5	#71048	ProcAuto does not end.
11.23.3.4	#62675	Sometime PRL invokes NICIM PA with expired bearer token.
11.23.3.3	#54687	External widgets created in Bricks does not work in Procedure Launcher LM.
11.23.3.2	#60060	Proc Launcher is currently obstructed.

Patch number	AskMe ID	Description
11.23.3.1	#56863	Proc Launcher is currently obstructed.

2.5.2.8 Storage

Patch number	AskMe ID	Description
11.23.3.3	#51787	Upload file use physical file name instead of user name.
		Remove Licenses from Storage Service.
		Starting Orchestrator with Storage Service integrated does not work.

2.5.2.9 Unit of Measurement

Patch number	AskMe ID	Description
11.23.3.3	#315975	In Oracle database, after security fix, does not work.
11.23.3.2		Implementation: Security enhancement.
11.23.3.1		UOM Product uninstall unexpectedly in Update.

2.5.3 Master Data Services

2.5.3.1 ShiftBook

Patch number	AskMe ID	Description
11.23.3.22		Implementation: Security enhancement.
11.23.3.21		Implementation: It is not possible to upload down times from SHB (columns do not currently have unique values).
11.23.3.20	#66940 - #68192	Implementation: Generic save error when putting a stop at plant level.
11.23.3.19	#63283	ShiftBook Error.
11.23.3.18	#66079	Issues in saving Resource Calendar Capacities.
11.23.3.17	#65230	Selected days are not visible.
11.23.3.16	#61658	Enable external products to view factory calendar days upon unlocking the factory calendar.
	#63861	The VIRTUAL_CALERIS table does not consider the recurrent days off (SAT/SUN) specified in the Factory Calendar.
11.23.3.15	#64837	Visualization issue in variations when client has a different timezone from server.
11.23.3.14	#58890	Issues with resources Capacity from Shift book.
11.23.3.13	#58016	Holiday configurations are not functioning properly in the integrated R&SP and Shiftbook system (Part 2).
11.23.3.12		CORE: toolbar issues.
11.23.3.11	#58016	Holiday configurations are not functioning properly in the integrated R&SP and Shiftbook system.
11.23.3.10	#57474	Error in the search for a week calendar.
11.23.3.9	#56942	Virtual calendars are not determined by the base working shift.

Patch number	AskMe ID	Description
11.23.3.8	#55685	Implementation: Batch API modifications for improved grouping of variations spanning more than one day.
11.23.3.7	#57456	Unable to assign shifts to resources within SOP.
11.23.3.6	#54225	The <code>VIEW_TURNI</code> table is extremely slow.
	#55685	When there is concurrent holiday for factory calendar and variation on a day, scheduling does not count the variation.
	#55685	Implementation: Enable definition of downtime variations for non-leaf equipment + Batch API modifications for handling downtime variations.
		Error in deleting inherited variation.
11.23.3.5	#54728	Cannot open weekly calendar page.
11.23.3.4	#51152	Unable to Save/Add Variation.
11.23.3.3	#52003	Shifts request infinite loop.
11.23.3.2	#49607	Holidays inserted in a Factory Calendar are not visible in CALERIS when an Oracle DB is used.
11.23.3.1		Issue related to the integration with SAM regarding bulk creation of Breakdown & Preventives.
		Issue related to the integration with Scheduler regarding Batch controller (improved performance allowing pre-filtering on StartDay and EndDay).

2.5.3.2 Material

Patch number	AskMe ID	Description
11.23.3.1		Implementation: Security enhancement.

2.5.4 DB Update

Patch number	AskMe ID	Description
11.23.3.3		Implementation: Security enhancement.
11.23.3.2		Compare Version Jobs.
11.23.3.1		Set Timeout Jobs to Infinity.

2.5.5 Utilities

Patch number	AskMe ID	Description
11.23.3.11		Implementation: Security enhancement.
11.23.3.10		Implementation: Security enhancement.
11.23.3.9	#59861	Worksheet print does not include attachments.
11.23.3.8	#60999	RestCtl: When Status request fails for a timeout, polling is aborted.
11.23.3.7	#56475	RestCtl: When Access Token request fails, polling is aborted.
11.23.3.6	#55574	Delphi: Backporting Awake Azure SQL Connection.
	#56908	Implementation: Handle retry attempts in calls to CC.
11.23.3.5	#55358	ExpMovDB: Problem in exploding materials.
11.23.3.4	#53937 - #54406	CORE: RestCtl does not send user in Http headers.

Patch number	AskMe ID	Description
11.23.3.3	#51431	Seyriu: License client library is not updated.
11.23.3.2	#53260	Delphi: Awake Azure SQL Connection (PBI 236727).
11.23.3.1	#48677	MRP creates RDA even if not necessary.
	#49417	Printeruser server MUST not print.
	#50491	It is not possible to archive ODL Type 5.

3 *Known Issues*

The following list of known issues only refers to the current version, Factory Scheduling Solution 2023.1. Please read this chapter before reporting new bugs.

3.1 O.S.A.

3.1.1 Analytics

AskMe ID	Description
	Spreadsheet clips are not properly displayed on mobile devices.
	If a dashboard contains a Grid clip configured with the "collapse columns group" property enabled, the export to PDF/Word format fails.
	Master-Detail dashboards are not optimized for mobile devices, thus affecting their usability.
	When configuring a slideshow, it is possible to select, in addition to standard dashboards, the "parametric clip dashboard" and "multiple clip dashboard", but they cannot be displayed in the slideshow execution.
	Performance of scrolling operations in a Grid clip are affected by the virtual pager when a large number of columns is involved.

3.2 X3

3.2.1 X3 Interface

AskMe ID	Description
#62886	When the user has a matrix(ices) configured that have no exceptions the import will fail with the message (Value cannot be null. Parameter name: source" while importing the matrices COSTI_SETUP). This issue

AskMe ID	Description
	can be worked around by inserting an exception in X3 even if this value is equal to the default values.

3.3 Common

3.3.1 ACM

AskMe ID	Description
#11800	The token included in the header might become too long and cause failures; this is commonly due to a great number of roles assigned to the user. NOTE: As a workaround, it is possible to use roles' inheritance, thus avoiding the growth of assigned roles to a single user.
	Upon upgrading from a version equal or lower than 11.6.X of ACM, in a scenario without the ACN component, the ACM database migration fails at the first run of the WebManager application. NOTE: As a workaround, it is possible to restart the application and run it a second time.

3.3.2 Base Services

3.3.2.1 Bricks

AskMe ID	Description
	Upon editing a widget with Bricks Widget Editor, the headers of Grid or FlexPivot widgets might present different captions than the ones visible when the widget is shown within a module page.
	Bricks Widget Editor does not provide an editor for customizing tooltips in widget charts.

AskMe ID	Description
	It is not possible to modify settings of a custom widget library (UMD file) since Control Tower ignores library configurations stored under DEFAULT Company Chart node. As a consequence of that, multi-instance, that requires library configuration file modification is not supported.
	Bricks Entity Manager does not support the IN filter operator on defined entities.

3.3.3 Master Data Services

3.3.3.1 ShiftBook

AskMe ID	Description
	Upon adding a new recursive holiday, the holiday is not replicated correctly in the given days, but it is only present in the first one.
	Upgrading from 11.6.X version, the CoreDB connection properties are not automatically retained from the previous installation but are asked again to the user.

3.3.3.2 Material

AskMe ID	Description
	In Material Layer and Material Definition Layer tiles, the Add Button is not enabled until a row is selected.
	If a Bill of Material contains materials that consume themselves, the implosion and explosion algorithm may show duplicated or incorrect Bill of Material segments.
	When upgrading from a 11.7.X version the Material Service database, migration fails at the first run of the WebManager application.

3.3.4 Core

AskMe ID	Description
	If a widget, whose configuration comes from a previous version, has a JOIN that contains special characters (e.g., ' ', '-') in its name does not show any values in the joined columns.
	In grids with frozen columns when user zooms the page using the browser feature, some rows may not be visible.
	Context Menu items are not correctly shown on the last visible pivot table's rows. NOTE: It is recommended to use the full-screen mode in this case.
	Issues with URL's case sensitivity during login: The authentication procedure for accessing to the Scheduling Solution requires that all web modules are browsed using the exact URL used in the IIS deploy. This is due to the fact that authentication cookies paths are case-sensitive and may lead to errors during the login process if they are not aligned with the case of the web module application. NOTE: As a workaround, an end-user can create bookmarks with the correct case to avoid typing URLs with wrong cases.
	On some scenarios, performing changes on a grid's columns (through the "User Settings" button) after the access token is expired results in changes not persisting and an error to occur.
	When upgrading from a previous version in which not all master data services were installed (e.g., from 11.6, where only ShiftBook and Unit of Measurement were available), the migration procedure fails because of missing master data service installed (Material and Recipe services). NOTE: As a workaround, all the master data services should always be installed.

3.3.5 Utilities

AskMe ID	Description
	[SQL Server only] On SQL Server database, empty strings are not managed as NULL values (as in Oracle).