

Informatica[®] MDM - Product 360 10.1

Release Notes

Informatica MDM - Product 360 Release Notes 10.1 December 2020

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Preface

Refer to the *Informatica[®] MDM* - *Product 360 Release Notes* to learn about new features and enhancements, behavior changes between versions, and support changes in this version.

Informatica Resources

Informatica provides you with a range of product resources through the Informatica Network and other online portals. Use the resources to get the most from your Informatica products and solutions and to learn from other Informatica users and subject matter experts.

Informatica Network

The Informatica Network is the gateway to many resources, including the Informatica Knowledge Base and Informatica Global Customer Support. To enter the Informatica Network, visit https://network.informatica.com.

As an Informatica Network member, you have the following options:

- Search the Knowledge Base for product resources.
- View product availability information.
- Create and review your support cases.
- Find your local Informatica User Group Network and collaborate with your peers.

Informatica Knowledge Base

Use the Informatica Knowledge Base to find product resources such as how-to articles, best practices, video tutorials, and answers to frequently asked questions.

To search the Knowledge Base, visit <u>https://search.informatica.com</u>. If you have questions, comments, or ideas about the Knowledge Base, contact the Informatica Knowledge Base team at <u>KB_Feedback@informatica.com</u>.

Informatica Documentation

Use the Informatica Documentation Portal to explore an extensive library of documentation for current and recent product releases. To explore the Documentation Portal, visit <u>https://docs.informatica.com</u>.

If you have questions, comments, or ideas about the product documentation, contact the Informatica Documentation team at infa_documentation@informatica.com.

Informatica Product Availability Matrices

Product Availability Matrices (PAMs) indicate the versions of the operating systems, databases, and types of data sources and targets that a product release supports. You can browse the Informatica PAMs at https://network.informatica.com/community/informatica-network/product-availability-matrices.

Informatica Velocity

Informatica Velocity is a collection of tips and best practices developed by Informatica Professional Services and based on real-world experiences from hundreds of data management projects. Informatica Velocity represents the collective knowledge of Informatica consultants who work with organizations around the world to plan, develop, deploy, and maintain successful data management solutions.

You can find Informatica Velocity resources at <u>http://velocity.informatica.com</u>. If you have questions, comments, or ideas about Informatica Velocity, contact Informatica Professional Services at <u>ips@informatica.com</u>.

Informatica Marketplace

The Informatica Marketplace is a forum where you can find solutions that extend and enhance your Informatica implementations. Leverage any of the hundreds of solutions from Informatica developers and partners on the Marketplace to improve your productivity and speed up time to implementation on your projects. You can find the Informatica Marketplace at https://marketplace.informatica.com.

Informatica Global Customer Support

You can contact a Global Support Center by telephone or through the Informatica Network.

To find your local Informatica Global Customer Support telephone number, visit the Informatica website at the following link:

https://www.informatica.com/services-and-training/customer-success-services/contact-us.html.

To find online support resources on the Informatica Network, visit <u>https://network.informatica.com</u> and select the eSupport option.

CHAPTER 1

Introduction

This chapter includes the following topic:

• Introduction to MDM - Product 360 10.1, 7

Introduction to MDM - Product 360 10.1

Informatica's strategy is to strengthen our customers with our leading multi-domain MDM solution for consolidating all master data and leveraging the potential of relationship insights across it. For that, Informatica offers trusted master data-fueled applications for dedicated use cases, industries, and roles. One important use case is around enabling collaboration for new product introduction across all channels. Product information and experience management as a vital component of master data management.

Product 360 leverages the full power and capabilities of Informatica's Intelligent Data Platform and provides a unified user experience, built-in data quality engine, business process management, search, and metadata, all inherited from the MDM architecture it's built on. This allows you to start smart and grow fast, making it easy to adapt to both, market changes and the competitive landscape.

Within the same year which Informatica has been launching the major release of 10.0, we are proud to bring the next key set of innovation to our customers. Informatica MDM - Product 360 10.1 comes with a rich set of new capabilities to further help you delivering more effective product content to customers across digital channels. While delivering a huge number of features towards business user experience, an equal amount of new possibilities can be found in the underlying platform services and supported use cases for enterprise scalability.

We hope you enjoy this release and all the great new things that come with it.

The key innovations are:

User Experience	 Completely revamped web user interface, including new capabilities to bring user experience to the next level Automated content enrichment with AI-driven product classification using the CLAIRE™ recommendation service Deep visibility into data changes and history with the next-generation audit trail component to democratize data for users
Enterprise Scale and Platform Enhancements	 New Object API component allowing read access to complete product records by a single call Swagger UI (OpenAPI) to provide a visual user interface when working with the List API or Management API of Product 360 Enhanced batching of high data load operations to significantly boost performance in enterprise deployments and setups

CHAPTER 2

User Experience

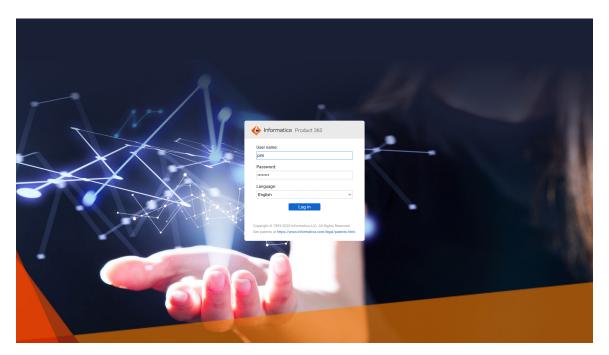
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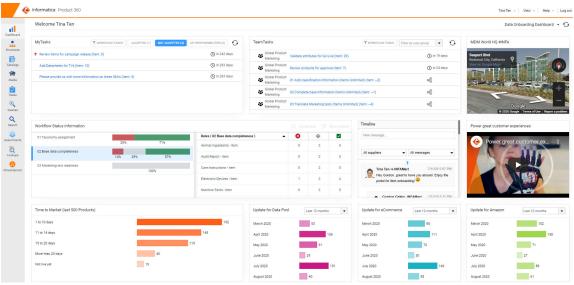
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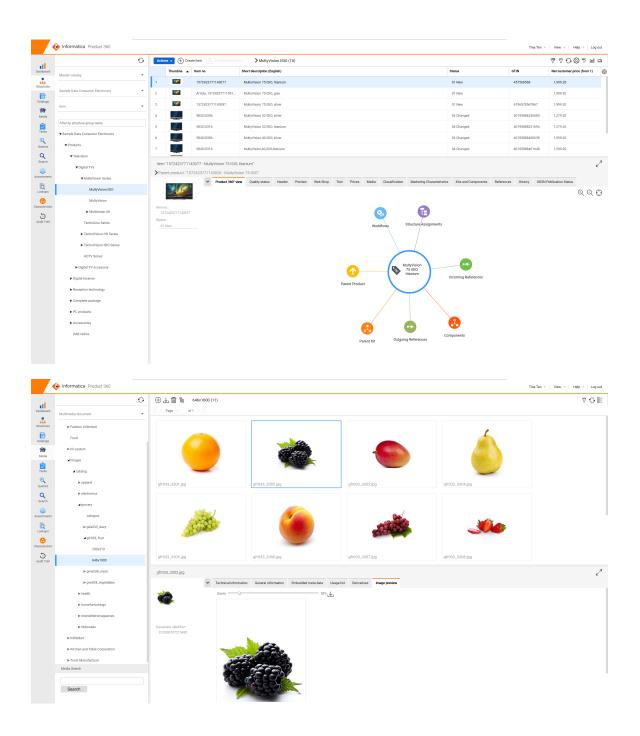
Product 360 Web UI shines in a new lightweight look and feel

A bright and fresh appearance has been introduced for the Product 360 Web UI.

This revised look and feel not only creates a new experience but also improves productivity and user guidance by highlighting which fields are editable, improving the visual correlation between elements, and many more visual enhancements.







Historic information at your fingertips: Web-based Audit Trail

As the history of data is a crucial asset for many users in various roles, an easy to understand visualization for historic data has been introduced.

History tab

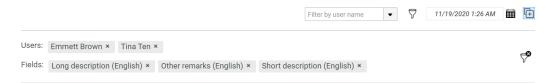
A web-native "History" tab has been introduced (also available as view inside the Desktop UI of Product 360). It is available for products and other data types to access the information right in the context of a record. It is possible to select one or multiple objects, to view all changes chronologically. The number of change records to be displayed before clicking on "Show earlier events" can be configured in the plugin_customization.ini file. The user can also decide to look at all change entries at once, using the "Expand all" option enabling a scroll-through experience.

The data is presented in the user's language and locale. The user's permissions on the data are respected and to see data of a deleted part of the data model a specific action right has been introduced. Similarly, it is configurable by action right if the user is allowed to see who made the corresponding changes to the records.

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Filters

The history tab includes three types of filters to quickly narrow down the data and finding relevant changes. It is possible to filter on which users' changes are showing up, to only show changes which happened before a specific date and time, or only for selected fields. For the field filter, the user has the possibility to leave the qualifications empty, allowing the filter to be applied on any qualification (e.g. see changes on a price of any currency). All filter settings are remembered across sessions, allowing the user to only focus on what she is interested in and can conveniently be reset with the "clear filter" icon.



Revert a value

In case the user wants to revert to a previous value (e.g. an undo of setting a value in case of a mistake), a "Revert" button is displayed on hover over a value. Clicking it will show the currently active value, and after confirmation, will set the old value as a new one (or re-create it in case it no longer exists overall).

	Revert the field value
With the ISIO models in the new MultyVision series, TechniSat has expanded its provenmulti-tuner concept to include yet another transmission path. Besides the ability to receive digital TV and radio channels via DVB-S, DTT and DVB-C without an additional receiver, the MultyVision ISIO includes an integrated IP module to allow access to internet content as well. For TV viewers, this means that pressing the internet button on the remote control while watching regular TV programmes calls up interactive services and media libraries, as well as browse the internet at will. This melds various media together within one device and off ers an interactive TV experience. From now on you can shape your television viewing individually and watch your favourite fi Ims regardless of the TV schedule. Innovative technology. Individual content. Interactive experience. The MultyVision ISIO has it all.	Reverting a value will set the selected value as the new active value, or create it in case it no longer exists. Affected field: Long description Current value: or ops Revert to: With the ISD models in the new MultyVision series, Technist has expanded its provenutLandr cancels an integrated PAS, DTI and DVBC without an additional receiver, the MultyVision ISD Actional an integrated PM models to allow access to internet content as well. For TV viewers, this means that pressing the internet button on the renew digital TV and radio channels via DVBS, DTI and DVBC without an additional media libraries, as well as browse the internet at will. This media various media together within one device and off sea an interacted PV appendence. From own ony our an shape your television viewing individually and valut) your favourite films regurdless of the TV schedule. Incorate technology, individual content, Interactive experience. The MultyVision ISID has it all.
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Flex UI

To support use-case driven work, the history view is also available as a component for Flex UIs. With that, it is also possible to pre-define filters via the Flex UI configuration, allowing it to show only changes of defined users, fields, or time according to the use-case and without the user needing to set those filters manually.

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Audit Trail search

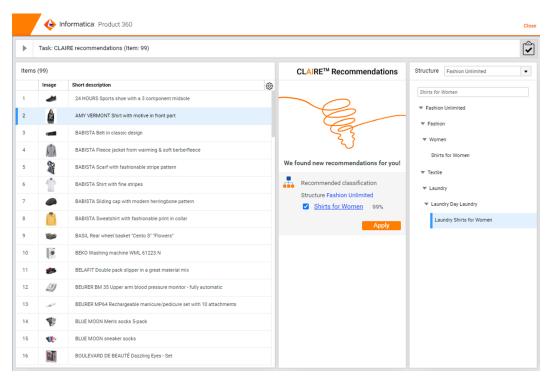
For advanced needs, a powerful Audit Trail search is available. This allows you to find changes across data types, change types (e.g. deleted objects), time frames, initiators, and users. For the search with identifiers, one or multiple identifiers are possible to be set, and wildcards are supported as well. It can also be searched by unqualified fields (e.g. any "Price"), and containers can be selected (e.g. the catalog of an item), including searching across all catalogs, or only within supplier catalogs.

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Note: For the platform improvements and migration of Audit Trail, please have a look at the chapter "New Audit Trail architecture" below, also the Audit Trail chapter in the Knowledge Base, which is part of the "Technical documentation (HTML)", contains further details.

CLAIRETM recommendation services

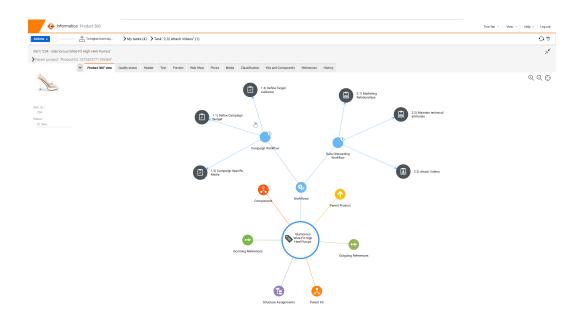
Introducing the latest CLAIRE integration to Product 360. With the CLAIRE recommendation services accelerator, it is now possible to follow a machine learning approach to automatically classify product data into structure groups. The accelerator comes ready built and doesn't require complex manual tuning to get you started. All that's needed is to generate a model from within Product 360 that consists of existing product to structure group relationships. The model can then be used to auto suggest or directly classify new product records. The new "CLAIRE Recommendations" panel for Flex UIs is the perfect assistant of a business user to take fast decisions.



And besides that, the same model can be leveraged in batch via DQ rule configurations including flexible threshold parameters to control if a new record should be classified automatically by the system based on prediction accuracy. Further details on setup and usage can be found in the documentation shipped with the accelerator package of the release.

Workflow task visualization in Product 360° view

To get a holistic picture of the workflow tasks which are currently available for a product, the Product 360° view now includes the capability to see all workflow tasks an object is currently part of. This feature allows the user to check what needs to be done on the current product and navigate to the corresponding workflow tasks right from directly within the Product 360° view.



On expanding the "Workflows" node, it will list all the workflows the selected object is part of. On further expanding the nodes, the user will be able to see all the workflow tasks which contain the current object.

The symbol of the task reflects, if the user is required to take action, as the task is assigned to her





, to

her user group

, or if the task is assigned to somebody else

On hover, the user is presented with two icons. These icons allow the user to quickly see the details of the workflow task, and to navigate to the task itself.



Focus mode for distraction-free working

This functionality provides a distraction-free workspace when focusing on a singular item. Focus mode is great for working with data-intensive layouts or the Product 360° graph view.

For products, items, and several other views in the Product 360 Web UI a button \swarrow in the detail view is used to enter into Focus Mode. When in Focus Mode, the detail view tab area takes up most of the available screen real-estate, hiding other views which are not important while focusing on one item at a time. To enter or exit the focus mode, use the Focus Mode icon in the detail tab or the keyboard shortcut Ctrl + Shift + F.

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While in Focus Mode, it is still possible to navigate between different objects. When exiting the Focus Mode, the previous layout will be restored.



Note: To learn more about the new Focus Mode, please have a look at the "Working with Focus Mode" chapter in the web configuration part of the configuration manual.

Easily find, arrange, and hide tabs

With this functionality, users can now easily navigate between a large number of detail tabs using the new tab navigator dropdown. Finding and navigating to a particular tab can easily be achieved by either scrolling through the alphabetically sorted list of tabs, or simply typing the name, which filters down the list to choose from.

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To provide new possibilities to define each user's personal workspace and improve productivity new tab configuration options have been introduced.

The personal order of tabs can be defined via drag and drop of the tab headers (e.g. to arrange more frequently required tabs to the front).

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ANTENNO DE		1	Animal in;	gredients (chi) - II	em	🔽 ок				Characteristics			11/10/2	020 8:35 AM	
0.:		2	Animal in;	gredients (deu) -	tem	🔽 ок				Characteristics			11/10/2	020 8:35 AM	
/_6382437684		3	Animal in;	gredients (dut) - I	lem	🔽 ОК				Characteristics			11/10/2	020 8:35 AM	
New		4	Animal in	gredients (eng) -	tem	🔽 ОК				Characteristics			11/10/2	020 8:35 AM	
		5	Animal in	gredients (esl) - If	em	🔽 ОК				Characteristics			11/10/2	020 8:35 AM	
		6	Animal in	gredients (fin) - It	m	🗸 ОК				Characteristics			11/10/2	020 8:35 AM	
		7	Animal ing	gredients (fra) - It	em	🗸 ок				Characteristics			11/10/2	020 8:35 AM	
		8	Animal in;	gredients (ita) - It	em	🔽 ок				Characteristics			11/10/2	020 8:35 AM	
		9	Animal in;	gredients (jpn) - I	em	🔽 ок				Characteristics			11/10/2	020 8:35 AM	
		10	Animal in;	gredients (kor) - I	em	🔽 ок				Characteristics			11/10/2	020 8:35 AM	
		11	Animal in	aredients (nor) - I	lem	🔽 ок				Characteristics			11/10/2	020 8:35 AM	

Additionally, the ability to configure the tab visibility in the new "Configure tabs" popup will allow users to hide less frequently used tabs. The initial availability of tabs can still be defined per user group leveraging the "Interface visibilities". User-selected tab positions and visibilities are remembered across their sessions.

Actio	ns 🗸 🕂 Crea	ate item 🔒 To high		> Cha	aracteristics Sample Data (7)					
	Thumbnail	Item no.	Status		Configure tabs	\otimes				
1		AIW_6382437688	02 Accept	ed		_				
2		AIW_6382437684	01 New		Please select tabs to be visible in the curre be rearranged with drag and drop of the ta restore the initial order and visibility.					
3		AIW_6382437686	02 Accept	ed	Filter					
4	Pat Pasa patient	AIW_6382437682	01 New		1 // 10					
Item	"AIW_63824376	584 - Real Mayonnai	se"		Allergen related information					
		✓ Produce	ct 360° view	Header	Classification		ation	Marketing Characteristics	Logistical Characteristics	Kits and Comp
					Diet related information					
	HELLMANNS				GDSN Publication Status					
	REAL				GDSN general data		Pa	rent Kit		
ltem n					Header				S	
Status	V_6382437684				History		-	Incor	ning References	
01	New				Ingredient additives			Real		
					Ingredient component			Mayonnaise		
					Item ingredients	2	$\boldsymbol{\lambda}$		-	
					Kits and Components				8	
							-		Components	
					Reset C	K Cancel				

Multi-relationship generation on the Web UI

In scenarios where one product should be related to multiple other products of the same type, new functionality has been introduced to increase efficiency.

Users can now select multiple objects while creating references or assignments in the popup window, using the Ctrl or Shift keys. This has been enabled for the following areas:

- · Attach references for products, variants, and items
- · Attach components to kits
- Attach items of the product (variants of the product / items of the variant)
- · Attach products, variants, and items to a media asset

👍 Informatica[®] Product 360 ÷ Actions 👻 ♥ ♥ � � ♥ ₪ ₽ ▼ E { Thumbnail GTIN Short description (English) Master catalog Structure 17 40195882276068 TechniMount, black Sample Data Consumer Electronics . 18 40195885431648 TechniLine 40 HD, black / titanium Catalogs • Item 19 40195885430658 TechniLine 40 HD, black / silver ۱ 20 40195885432638 TechniLine 40 HD, black / high gloss black Media Filter by structure group name 21 40195885231668 TechniLine 32 HD, black / titanium metallic, Full-HD Tasks ▼ Sample Data Consumer Electr. 22 40195885320690 TechniLine 32 HD, black / silver metallic, Full HD ▼ Products € 23 40195885322670 TechniLine 32 HD, black / high gloss black, Full HD Oue Television show all Q 24 40195883251118 TechniLine 32 HD incl. CI + / 32" FullHD / Single HDTV MultiTune... Digital receiver 25 40195883251040 TechniLine 32 HD incl. CI + / 32" FullHD / Single HDTV MultiTune... ٢ Reception technology Assortments 40195883251286 26 TechniLine 32 HD incl. CI + / 32" FullHD / Single HDTV MultiTune. Complete package Lookup 27 40195880385786 TechniControl, black ▶ PC products 6 28 40195881385372 TechniControl Plus, silver Accessories You have selected 9 objects of the type "Item" as the target reference object OK OK and close browser window

Create reference				\otimes
Complete the fields req	uired for refer	ence creatior	n or click her	e
Reference type: *	Essential spare pa	art		•
Referenced object type: *	Item			•
Referenced object number: *				
	0003/4520 ×	0005/4520 ×	0000/4520 ×	
	0002/4563 ×	0001/4563 ×	0000/4563 ×	
	0033/4444 ×	0007/4536 ×	0005/4536 ×	
Number:	1			
Sequence:				
		OK	Car	ncel
		(Create another	reference

DQ-driven navigation to the source of issues

The quality status view provides an important overview of the quality of data for the current product. In order to let the user take direct action on an identified issue, easy ways to get to the relevant Flex UI or corresponding detail tab have been introduced.

If the user has selected a rule, two buttons will be enabled, in case the respective user interface has been configured for this rule.

Buttons for navigation are:

- Navigate to the tab 🖍 . On clicking this button, the user gets navigated to the configured detail tab.
- Navigate to Flex UI 🗵 . On clicking this button, the configured Flex UI template is opened in the new browser tab.

1										g Characteristics	-		References	Sour
	\Box	ı ד (\$7.								All channels	~		
		Rule					•	Status		Message			Channels	ĘĘ
	5	Calcula	ite sum of 'Q	uantity of ne:	t lower level ite	ms'		OK		No Error			GDSN Data Po	ol
	6	Calcula	ites the chec	k digit of 'GT	N' (GTIN14)			🗸 ок		The check digit of	of this GTIN was added		GDSN Data Po	ol
	7	Check	'Base unit or	each' item h	as no child			🗸 ок		No Error			1WorldSync US	; GDSN
	8	Check	Brand name	is not empt				😣 Faile	d	Input data value	is blank or null		GDSN Data Po	ol
	9	Check	Brand owner	GLN'				🗸 ок		No Error			1WorldSync US	; GDSN
	10	Check	'Canceled da	te' is empty	f 'Discontinued	date' is p	opulat	🗸 ок		No Error			1WorldSync US	; GDSN
	11	Check	'Canceled da	te' is not em	oty then 'Discon	tinued da	te' mu	🗸 ок		No Error			GDSN Data Po	ol
	12	Check	'Case' has a	valid child pr	oduct type			🔽 ок		No Error			1WorldSync US	; GDSN

Note: For more details on how to configure this relationship between DQ rules and corresponding UI elements please consult the "Web Configuration" chapter within the configuration manual.

Query visibility configurable via interface visibilities

By popular demand Product 360 is finally capable of hiding individual queries per user group visibility adjustments. In order to reduce the complexity within the queries dropdown as well as for more flexible user configuration setups new interface visibility options for such queries/entity reports have been introduced. The below example shows a significant reduction of queries a user of this group is allowed to see on the user interface later on:

irouping		Allo 🔽	Name	Category	Туре
· · · · /			Items in a catalog (byCatalog)	ltem	Query
Type Category	2		'Item' objects by the 'Item no.' field (byldentifiers)	ltem	Query
	3		Items classified by (classifiedBy)	ltem	Query
informatica PIM View (58)	4		GDSN confirmation status (byGDSNConfirmationStatus)	ltem	Query
Query (35)	5		Items in a structure group not classified by (byStructureGrou	ltem	Query
ltem (29)	6		Objects of data type 'Item' by their unique service API identifi	Item	Query
ltem assortment (3)	7		GDSN publishing (byGDSNPublishing)	ltem	Query
Web List Definition (5)	8		Items with a higher-level product (withProduct)	ltem	Query
Web Tab (56)	9		Supplier items that are not in the master catalog (inSupplier	ltem	Query
- WED (30)	10		Items in assortment (byAssortment)	Item	Query
	11		Items not classified by (notClassifiedBy)	ltem	Query
	12		Items from structure group (byStructureGroup)	ltem	Query
	13		Items without a higher-level product (withoutProduct)	ltem	Query
	14		Supplier items that are in the master catalog (inSupplierAnd	Item	Query
	15		Packaging hierarchy (hierarchyByReferenceType)	ltem	Query
	16		Items in a catalog with multiple mappings to the same struct	ltem	Query
	17		Objects of data type 'Item' by workflow status (byWorkflowS	ltem	Query
	18		Objects of data type 'Item' from a saved query result (byRep	Item	Query
	19		Items in a catalog assigned to node level structure groups (g	ltem	Query
	20		GDSN message in progress (byGDSNMessageInProgress)	ltem	Query
	21		Items from structure group and subordinated structure grou	Item	Query
	22		Items by status reached (byStatusReached)	ltem	Query
	23		Items by search query (bySearch)	ltem	Query
	24		Items by status not reached (byStatusNotReached)	ltem	Query
	25		GDSN response (byGDSNResponse)	Item	Query
	26		Items from master catalog	ltem	Query
	27		Items in master catalog assortment (byMasterAssortment)	Item	Query
	28		Items in a list of products (byProducts)	ltem	Query
	29		Kits and components from catalog (kits)	Item	Query

10 11				O	Actio	ns 🗸 🕂 Crea
Imme is a catalog Imme classified to <	Dashboard	Product		-		Thumbnail
Immedicated by 2 Them objects by the 'Ranno field 3 Them objects by the 'Ranno field 4 Brann to a catalog 5 Astributes 6 Astributes 6 Material catalog 7 Outaracteristics Query builder Search 12					1	
Therr objects by the time no field 3 Reme is a catalog 4 Reme is a catalog 6 Astitutes 6 Item deminication 7 Obarscteristics Query builder Search 12	ctures	Items in a catalog		•	2	1
herms in a catalog 4 Evend stand, quries 5 Attitudes 6 Nem identification 7 Validation rule 8 Characteristics Query builder 10		Items classified by			3	
htme is catalog Exercitization of the international of the internation of the international of the i		'Item' objects by the 'Item no.'	field			
Arbibues Hern dentification Valdention rule Characteristics Query builder 9 - 10 - 11 Search 12		Items in a catalog			4	
Nem identification 0 Validation rule 7 Characteristics Query builder 10 11 Search 12		Saved search queries		•	5	
Rem dentication Image: Characteristics Query builder Outerschristics Query builder 10 Image: Characteristics Search 12		Attributes	•		6	
Cheracteristics Query builder Search 12 Search		Item identification	•	•		
Characteristics Query builder 9		Validation rule			7	
9 10 11 35 Search 12				•	8	
Search 12		Characteristics C	uery buil	der		
Search 12 2-	ts				,	
Search 12 2					10	
12				_/	11	非許
	otio	Search			12	
						_
					Deta	il view

Workflow tasks allow to assign and accept all items in one go

To further improve the user experience working with workflow tasks, a new option to assign or accept all items from the workflow task in one go has been introduced. If the user selects a workflow task and clicks on the "Accept task content" menu entry, all objects which are currently contained within the task will be accepted. It's not necessary anymore to go into the task and select all objects manually. By using the menu entry "Assign task content" a user can furthermore directly assign all objects of a workflow task in one go and on task level already without the need to open the task.

Actions 👻 😭 Accept	Accept task cont	ent	Tasks assigned Users of my us		Open New task	
Maintain		Pt	Tasks assigned		As task group	
	7206_task (Item: ~1) 7206_task (Item: ~1)	N		3 3	Accept task content Assign task content	
					Сору	Ctrl+C
Vorkflow tasks				ß	Paste	Ctrl+V
Accept task content				×	Delete	Delete
Assign task content				e P	Refresh	F5
lavigation	T				Compare	
Open Flex UI Show content					Rename	F2
ettings Configure menu settings					Properties Edit	

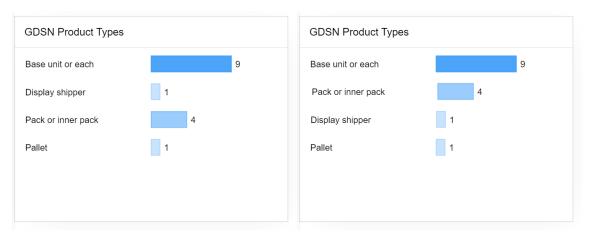
Note: For a better user experience and overall user guidance, the possibility to change the assignee of a workflow task has changed holistically to this new paradigm which means the selection of an assignee in the detail tab is not possible anymore.

Remember last used web search index

The last used web search index is now always stored in the browser's session cookie. Therefore, when the user logs into the application, the last selected index will be automatically prepopulated in the indices dropdown for improved usability. No more selecting the same index every time a user goes back into the web search section to lookup some product data.

Sort bar charts by the total number of objects

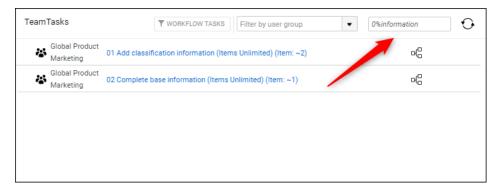
Two new parameters for the bar chart dashboard widget have been introduced. With this release, it becomes possible to decide whether a bar chart should be sorted alphabetical by its values (default) or rather based on the size of the bars itself.



Default appearance vs. newly introduced option for an adjusted look and feel:

Using wildcards to filter in task widgets

A new parameter has been introduced to the task widgets for dashboards. With that, it becomes possible to perform a wildcard-based search for task names within the widget itself. A nice and handy addition to filtering down a long list of related task names boosting the productivity of business users:



Note: The variables supported for wildcard search are "%" (any set of characters in between) and "_" (one character in between). Using backslash will escape the wildcards and include the actual value of "%" or "_" into the filter search.

Option to filter a list of products by All columns as default

Sometimes small things matter quite a bit. Hence this release allows you to change the default selection for the table filter in the web UI to "All columns". With that business users save a click when filtering tables for certain values across multiple fields in one go.

Action	s 🗸 🕀 Crea	ite item 🙏 To h	igher-level obj	> Fashion Unlimited (4)	Ş ڬ ∰ ŵ m 🖆
Filter by	All columns			✓ shirt	Filter
	Thumbnail	Item no.	Status	Short description (English)	දිටු
1		120046360	01 New	AMY VERMONT Shirt with motive in front part	
2	1	695052390	01 New	BABISTA Shirt with fine stripes	
3		739698480	01 New	BABISTA Sweatshirt with fashionable print in collar	
4		315424380	01 New	PAOLA Shirt in fleece quality	

If you want to change this to be the new default you can add the following to the plugin_customization.ini file:

```
plugin_customization.ini
#
#
# ------
#
# default 'Filter By' to 'All Columns' in top grid for items when using Filter in Web UI
# ------
#com.heiler.ppm.web.common/quickSearch.allColumns.preSelected = false
```

Note: The decision not to activate this setting by default is due to the fact that especially in high data load scenarios the performance cost searching across all columns at once is not always best choice.

CHAPTER 3

Enterprise Scale

This chapter includes the following topics:

- New Audit Trail architecture, 23
- Enhanced batching, 24
- Enhanced trigger setup, 26
- BPM workflow examples, 27
- Caching improvement, 29

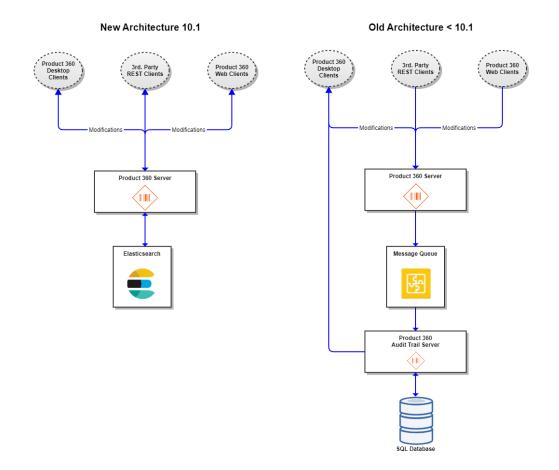
New Audit Trail architecture

In an ever-growing world of data, the requirements for storage, memory and computing power is increasing exponentially. This growth is not just due to the data size itself; it has an even greater impact considering the number of data modifications coming with it. Hence, the architecture of the Audit Trail module has been transformed to the next level. With Product 360 10.1, Audit Trail data will no longer be stored in a resource-intense relational database but in a lightweight document storage leveraging Elasticsearch.

With this approach, the performance of production systems increases significantly while the hardware requirements shrink down. The following chart indicates key results of benchmark tests that have been performed to compare the last releases with activated Audit Trail to each other:



The following chart gives an overview on the revised architecture and reduced complexity when it comes to storing audit log data with Product 360:



Note: The previously existing Audit Trail package is not part of the software shipping anymore. Old audit data can be migrated into the new Elasticsearch persistence. Details on the technical migration of old audit data can be found in the migration manual shipped with the release.

Enhanced batching

With the previous release already the message queue communication for data quality rule executions and business process management intercommunication has been introduced to increase system robustness in high load scenarios. This has been enhanced to also include the support of batching for DQ and merge processes now, to further improve performance especially in mass data and high load operation scenarios.

Data quality batching

Until the current release data quality message queue requests were processed one at a time. In order to have a better performance and resource utilization, these requests are now batched automatically within the same message queue. This leads to a performance improvement up to a factor of 5; especially in scenarios where many single requests to DQ are sent in a very short period of time. E.g. an item change event that was executed on thousands of single objects.

- Without batching, a sample set of 20k item records is taking approximately 25 minutes to complete the
 execution for a rich set of data quality rules if each item is triggered for execution individually (e.g. on
 mass item change events).
- With batching, the same set of 20k item records executing the same data quality rules, completed in our benchmark tests within approximately 5 minutes.

Results from the test scenario above:

Operation	Prior version no batching	10.1 with batching	Improvement
Sample data set 20k item records	25 minutes	5 minutes	5x



There is no change to the structure of the data quality request and response messages. The setting for the threshold can be defined in the plugin_customization.ini:

1	plugin_customization.ini
:	# # Message Batch preferences #
:	# Specifies the size(number of items) of data quality message batch # Default: 500 #dataquality.message.batch.threshold=500

Merge batching

Similar to DQ batching Product 360 10.1 enables the batching of merge processes. This especially increases performance in scenarios where many single merge requests are sent within a short period of time (e.g. on the last step of an enrichment workflow to build the golden record in the master catalog).

Note: Merge requests written to the Service API message queue or direct REST calls will still be processed as single requests. Only merge requests via batching queue will be considered.

Finish (approve) trigger batching

After batching of DQ and merge processes the next logical step in this improvement initiative was the batching of finish events for workflow tasks. This ensures a much better responsiveness of the application when users finish or approve a bunch of objects within a workflow task in one go. Instead of sending e.g. 1,000 individual finish messages only 1 finish message which contains all 1,000 objects will be sent. This especially saves resources on the BPM server but also within the message queue itself.

Enhanced trigger setup

With this release, the definition of triggers for data quality rule executions as well as for business process management has been enhanced and simplified. There are 4 major improvements in the UI configuration which lead to better administration and productivity in the setup of the system:

1. A multi-selection for the parameters to set up a single trigger configuration (e.g. for multiple catalogs in one go):

Inactive If this cond	ition is checked, the trigger configuration is deactivated and will not fire	^				
	/ho has modified the entity					
Users*:	<u>۷</u>					
User gro	ups					
The user gr	oups which has modified the entity					
User group	v					
🗹 Data typ	ies					
Data types	of the modified entity					
Data types'	tem 🗸					
multiple ch	which have been modified. Either by specifying them individually or based on one or namels. At least one of the fields need to be modified for the trigger rule to succeed. also be qualified just partly.			Amazon Characteristics Sample Data Coffee and Fashion Consumer Electronics Electronic Equipment Fashion Unlimited Food GOSN - GDSN items GDSN TV		
	Item 🗸 📴 Field Selection					*
-	ontaining the modified entity		All	None	<u>OK</u>	Cancel
Catalogs*:	Consumer Electronics; Electronic Equipment					
Supplier	2					
Suppliers o	f the supplier catalog					
Suppliers*:	v					

- 2. More data types are available to choose from.
- 3. A field selection dialog for the modification fields selection to support a convenient setup without the need to worry about technical syntax definitions.
- 4. An active flag for trigger configurations to be able to set them (temporarily) to inactive without the need to drop the whole configuration entirely from the setup of the server.

Besides these enhancements, a completely new trigger type for workflow setups has also been introduced. The new "Entity deleted" trigger event gives, for example, the option to inform third party systems like online stores via a workflow or direct queue communication to trigger corresponding updates.

Additionally, the payload for BPM triggers can be selected. It can be decided if only the meta information should be transferred (user, timestamp, affected fields), or also the old and new value should be included in the payload. This can be leveraged to keep downstream systems in sync with data changes.

Caution: Note that the payload format has changed and may require adaptions. Please find further information in the "Trigger Payload" chapter of the configuration manual.

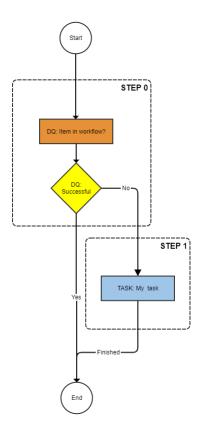
BPM workflow examples

The accelerator package of Product 360 10.1 includes a new business process management project called "StepWorkflow" providing reference templates for workflow implementations. It comes with the following major benefits:

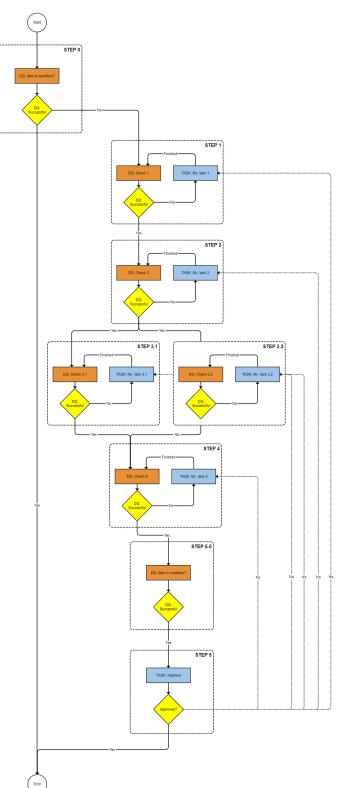
- The complexity of designing workflows has been significantly reduced following an easy XML definition approach
- The development of new workflows is much more structured
- It becomes a lot easier to troubleshoot workflow designs
- The sample project contains tested and Informatica approved re-usable code for further adjustments
- · The design reduces the amount of individually running processes on the BPM server significantly
- The templates enable batching by using the message queue built into their design right from the very start

So overall the "StepWorkflow" samples should enable you to rapidly design business-case-specific workflows with workflow tasks, Flex UIs, data quality checks and approve tasks based on a simple XML definition. The accelerator package also includes an example project with XML definitions of simple to more complicated workflows. These examples can be used as starting point for project specific process designs in production environments:

Simple example as part of the project (1 task)



More complex example as part of the project (5 tasks with DQ checks, parallel and sequential, and a final approval step)



Caching improvement

New caching technology has been introduced to allow the Product 360 server to cache more objects using the same memory footprint as in earlier releases. This results in overall better system performance. A new configuration file called CacheConfig.xml has been made available with that. The shipped default cache configuration should fit most customers deployment scenarios. If you have adjusted the settings via the existing ehcache.xml for caches with prefix dataGraph. it is recommended to monitor the system and the cache hit rate to approximate towards an optimum setup.

CHAPTER 4

Platform Enhancements

This chapter includes the following topics:

- Object API, 30
- Swagger UI, 31
- Application monitoring and metrics, 33
- Enhancement of the "unit" data model, 34
- <u>Channel specific references, 35</u>
- Supporting wildcard characters in item search, 35
- XSLT transformation step for file-based exports, 36
- Higher precision for decimal fields in data quality rules, 36
- GDSN accelerator enhancements, 37
- Auto-deletion of empty media asset attachment containers, 37
- Logging improvements, 38
- Supplier Portal mass media asset upload (Cloud only), 39

Object API

Up until now, single item driven integration scenarios required multiple List API calls followed by substantial effort to assemble the single item entity object from combining the relevant sub-entity information. With Product 360 10.1, a new Service API resource has been added which is capable of returning a single entity item, in a full hierarchical form with all its sub-entities and most importantly: in one single call. The Object API significantly improves the performance in integration scenarios requiring the full data of a single item by leveraging the use of in-memory caches optimized for single item retrieval, as opposed to the return of a large number of items by the List API.

URL pattern	/object/{entity-identifier}/{entity_item}
Method	GET
Media types	application/json, application/xml
Example	/rest/V1.0/object/Article/471101 /rest/V1.0/object/Article/'myItem'0'myCatalog'

Permissions

- The user needs to have the READ object permission for this API. In case she doesn't, the API returns HTTP 403 (forbidden).
- The user needs to have the READ field permission for a field. If she doesn't, the field will not be part of the data element, but no error is returned either granting flexibility in responses.
- The user needs to have the READ permission for qualifications (e.g. for language = English). If she doesn't, sub-entities which are qualified for this will not be part of the data element, but no error is returned either granting flexibility in responses.

Note: Note that the initial introduction of the Object API only caters for read use cases. Writing data back into Product 360 using REST methods currently still requires making use of the List API.

Swagger UI

By means of the REST Service APIs, Product 360 provides a set of powerful services that allow the read and write to almost any data described by the repository. However, in order to harness the true power of these functionalities, extensive Service API knowledge is sometimes needed to understand the parameters and metadata related to it.

With the release of Product 360 10.1, a dedicated Swagger UI utility that translates in-detail the full capabilities of the List API as well as the Management API is provided. The web-based accelerator offers a complete suite for interacting with these resources and their operations, thereby increasing the productivity in client implementations. With the aid of the Swagger UI, business users and workflow designers can quickly adopt the List and Management APIs by interacting with the visually rendered auto-generated OpenAPI specification which includes all repository-specific parameters as well. And with the one-step simple plug and play deployment, Swagger UI is available on Windows and Linux platforms in both standalone and service modes.

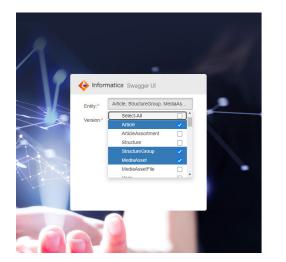
Visual scaffolding for server stubs

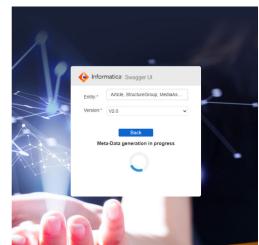
The automatic visual documentation of the Service APIs makes client-side implementation and consumption convenient.

Informatica Select an List API ~	也 Logout
Informatica MDM - Product 360 Swagger U	1
	Authorize 🔒
Server http://suv16qa35:1501/rest/V2.0/ v	
System field info Meta	>
POST Root entity Perform POST Operations for Root Entity	>
POST Sub entity Perform POST Operations for Sub Entity	>
Article Fetch 'Article' details at Entity Level	~
GET /list/Article/byAssortment Items in assortment	â
GET /list/Article/byCatalog Items in a catalog	â

Customer-specific data model API specification and metadata generation

The Swagger UI generates customer-specific entity definitions, which can be rebuilt anytime and as needed if subsequent data model changes apply. And an auto generated OpenAPI specification, with dynamically built metadata information, offers the most powerful and easy way to take full advantage of the Service APIs.





Intuitive user experience and integrated orchestration

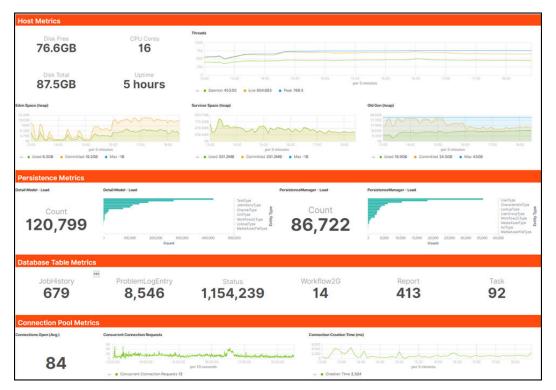
Field lists and operations, auto generated from the metadata engine, assist users to interact with the Service APIs without having to read manuals and research precise Service API operations or syntax definitions any longer. Furthermore, the Swagger UI publishes Service API's in CURL and REST formats which can be integrated into project implementations and workflow setups.

GET /list/Art	icle/byCatalog Items in a catalog	a
	pecified catalog. The master catalog (default) (or any supplier catalog may be specified here.
	heering and 0, 116 118261 and 0 (actor), 1	
Parameters		Cancel
Name	Description	
catalog		
string	The catalog for which the items are to b	e determined
(query)	v	
revision	 nust exi	st
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Application monitoring and metrics

With the inbuilt Micrometer instrumentation façade, Product 360 10.1 delivers over 150 system and application-specific dimensional metrics for actionable health insights and reporting of the environment. With vendor-neutral meters, it is now possible to independently provision an application performance

monitoring system of your choice. Additionally, Product 360 10.1 ships with an accelerator that includes predefined Elastic Kibana based reference dashboards providing an overview of all key metrics for application monitoring - ready to use and adopt as needed.



Enhancement of the "unit" data model

The data model entity of type unit has been refactored to allow for export, import and API based access from now on. This further supports daily operations within Product 360 for data integration use cases and also forms up a major benefit when it comes to transferring data between individual deployments.

The following list describes the main enhancements in more detail:

- A mandatory, globally unique code has been introduced which also acts as the external identifier of a unit. Migration scripts will use the so-called "System Units" unit system's codes for this. In case duplicates are recognized during migration, they are named accordingly. Please see the Migration Guide for further details.
- All unit system-specific fields are renamed to "Alternative ..." (e.g. "Alternative Code", "Alternative Symbol", etc.)
- Unit fields have been adjusted and correct categories are assigned to the fields
- The generic import has been activated for the unit entity
- The generic List API has been activated, hence units can now also be created and adjusted via the Service API
- Export data providers have been adjusted to support the unit root entity and all its child entities (existing templates might need to be adjusted, please see the Migration Guide for details)

Caution: Note that in order to realize this feature the release comes with integrated update scripts that will adjust your existing units in the system. It is strongly recommended to perform a data backup before and revise all units maintained in the system after the upgrade for consistency.

Channel specific references

The data model has been enhanced to allow the maintenance of channel-specific references for products, variants, and items. This includes all merchandizing references between products, variants, and items and gives more context to the reference type. Enabling for example, the setup to have a "cross-sell" reference only valid in context of a certain channel like the online store.

Technically this has been realized by adding to the ArticleReferenceType repository entity type and all custom entities which are based on it an additional logical key "Channel". By default, this feature is disabled to be compliant with older versions and the logical key for the channel is set to "Default channel."

To enable it, the repository needs to be adjusted. For details please take a look at the tec hnical documentation package under the chapter "Channel specific references" available in the "Installation and Operation" ZIP file.

Supporting wildcard characters in item search

Note: Changed default behavior

Since 8.1.1 HF5 as well as 10.0 HF1 and now also with 10.1 the behavior of wildcards in searches has changed. From now on a new operator "wildcard search" is provided, which will allow a user to use wildcard characters in the search query. All other comparison operators will not support wildcards any longer.

The new comparison operator "wildcard search" comes with the following main capabilities:

- It allows 2 wildcard characters '%' and '_'
- Underscore (_) returns results that contain any character in the position of the underscore
- Percentage (%) returns results that match the pattern of the search string
- Using backslash (\) before the wildcard character will make it behave like a regular character (e.g. "\%" and "_")

🛱 Context selection 🕼	No structure selected 🔗 Item search 🛛 🖉 Tasks 🛛 🖳 🗖
	· 🔡 🚔 🗊 🕥
Unnamed query	
that can be expanded us	ncludes those objects of the data type Item that meet all of the search criteria ing the "Field selection" button (AND link). es separated by "," can be used to specify search alternatives for each search
Filter by assortment	
Find field:	Short description (English)
Comparison operator:	wildcard search \checkmark
Comparison value:	battery%drill
Match case	
Display result in new	view Start search

XSLT transformation step for file-based exports

If XML based file exports have to be transformed into another format or structure, it is now possible to use the "XSL Transformation" post-processing step. This step can execute an XSL transformation through a configurable style sheet. The exported file will be transformed and replaced by the new file(s).

With that, another great addition to the powerful and flexible export engine of Product 360 has been added to the set of standard capabilities allowing for flexible transformations to accommodate target system requirements.

Higher precision for decimal fields in data quality rules

From now on it is possible to use decimal values inside data quality rules with higher precision. A precision of up to 28 digits per field can be leveraged now. High precision is disabled per default and can be enabled for all data quality rules or just for a set of specific data quality rules.

The setting for high precision can be found in the plugin customization.ini:

Caution: Existing custom rules, which use more than 28 digits, have to be adjusted so that all digits are reduced to 28-digit precision. This must be done prior to the Product 360 server update. However, the out of the box rules shipped with the software, do not require any manual attention.

GDSN accelerator enhancements

The GDSN accelerator is now fully compliant with GDSN 3.1.12. For details please take a look at the "GDSN Migration Guide for version 3.1.12" documentation in the accelerator package. In case of using the food and beverage extension, please take a look at those changes as well, because there are some which could affect your current installation. Some additional enhancements include:

- An XSLT transformation, which splits export files in order to have not more than 100 items in a single catalog request
- · The sub-entity deletion during import feature is enabled for publication status
- Import mappings to import the publication status are provided (1WorldSync source only)
- A pre-import step is provided which dispatches the different messages and selects a corresponding import mapping
- Two new import functions "findOrCreateCustomer" and "findOrCreateSupplier" that create imported customers or suppliers in the system if they do not exist yet have been added

Auto-deletion of empty media asset attachment containers

With this version, we modified the behavior regarding empty media asset attachments. They will be deleted automatically if no asset is in the container anymore.

- The new behavior is active for all object types which can be assigned with a media asset document (e.g. item, product, variant, and structure group).
- The new behavior is also active for delete actions via REST calls.

- If a media asset attachment is automatically deleted, all its sub-entities including MediaAssetLang and its fields (e.g. English description, German alternative text, etc.) will be deleted as well.
- It is still possible to create an empty media asset attachment in the "Multimedia attachment" view of the Desktop UI.
- If Media Manager is used, media asset attachments will be deleted, once the last media asset document with quality originalimage has been deleted, which leads to the deletion of all other derivative media asset documents automatically. No changes on this behavior.

The feature allows for better control and cleanups working with media assets in general and prevents the presence of "ghosted" media asset attachments in the system.

Note: It is possible to re-activate the previous behavior by modifying this setting in the plugin customization.ini file:

com.heiler.ppm.mediaasset.core/removeAttachmentWhenLastDocumentIsRemoved.enabled =true/false

Logging improvements

Starting with 10.0 HF1 logging in Product 360 has been updated to run with log4j2. This means that a number of configuration files have been changed to support the newer version of log4j. Besides changes made in log4j configuration files, the wrapper.conf file needs to be adjusted as well in order to configure the path to the new log4j2.xml configuration. The following code snippet is an example for the Control Center component:

wrapper.conf

```
# Old configuration to specify the path to log4j.xml
wrapper.java.additional.11=-Dlog4j.configuration=file\:"%CLUSTERIX_CONFIGURATION_DIR%/
log4j.xml"
vs.
# New configuration to specify the path to log4j2.xml
wrapper.java.additional.11=-Dlog4j2.configurationFile=file:"%CLUSTERIX_CONFIGURATION_DIR
%/log4j2.xml"
wrapper.java.additional.12=-
Dorg.apache.commons.logging.LogFactory=org.apache.commons.logging.impl.LogFactoryImpl
```

Please note that the variable to the log4j path has also changed inside the log4j2.xml file. Instead of using $f_{j.path}$, you now need to use $f_{sys:pim.log4j.path}$ to access the log4j2 path.

Note: If you use the SDK, a new version of Eclipse (2020.06 or higher) is recommended. If there are still dependencies to the old org.apache.log4j plugin, you should create a new Eclipse workspace.

Product 360 Server and Desktop Client

The Product 360 Server and Desktop Client now store the logging configuration inside their new log4j2.xml files, replacing their old log4j.xml files. The location of these files has not changed.

Control Center

The Control Center logging configuration is also stored inside the log4j2.xml file.

Custom appenders

The required implementation to configure custom appenders has changed. To see what has changed, please check the example implementation of a custom appender under {server location}/sdk/examples/customizing

Media Manager

The logging configuration is now stored in the newlog4j2.xml file. This new configuration replaces the old log4j.properties file. The location of the configuration file within each module does not change. The same goes for the available loggers. This affects the following Product 360 Media Manager modules:

- Product 360 Media Manager Web application
- Product 360 Media Manager Process Engine
- Product 360 Media Manager REST Service for Supplier Portal
- Product 360 Media Manager Database Updater

Supplier Portal mass media asset upload (Cloud only)

It is now possible for suppliers to mass upload media assets via Supplier Portal also in the Informatica Cloud version of Product 360 and in a similar fashion as for non-Informatica Cloud deployed systems.

lnformatica				
I want to	Choose Mapping	Upload Data	Test Run	Release for Import
Open my dashboard Upload data to catalog	This wizard enables you to upload product information and corresponding media assets. The first step is to select an appropriate mapping for the data format. The mapping defines which fields from the input files are going to be imported. Please select a mapping:			
Edit catalog items	BMECat_1.2 Import			
View tasks	Initial Data Load			
View my organization	C Items basic data (CSV file)			
Edit my personal settings	Media Assets Use this mapping to provide your media files. Zipped media files ZIP A zip archive containing all media assets.			
				Next

This marks a major step towards a seamless experience working with Product 360 - regardless of the individual deployment model chosen.

CHAPTER 5

Changes in Packaging and Supported Platforms

This chapter includes the following topics:

- Accelerators, 40
- Deprecation notes, 40

Accelerators

A range of new accelerator packages has been made available with this release. All of them are explained in more detail in the above chapters.

- CLAIRETM recommendation services accelerator for machine learning-driven auto-classification of product records
- Swagger UI to allow a user interface-driven exploration of the LIST API and the Management API of Product 360
- StepWorkflow BPM reference templates to set projects up with a recommended workflow design from the very beginning
- · Application monitoring and metrics including sample dashboards for Kibana

Deprecation notes

- With Microsoft continuously dropping support for Internet Explorer even with Microsoft applications it has also been dropped from the section of supported browsers by Product 360 10.1.
- Microsoft Windows Server 2012 R2 has been dropped from the list of officially supported operating systems with Product 360 10.1.

For further details, please consult the Product Availability Matrix (PAM) available under <u>https://</u> <u>network.informatica.com/community/informatica-network/product-availability-matrices</u> as well as with the shipping of this release.