



Functional Release Notes

Version 5.12.16

Release Information



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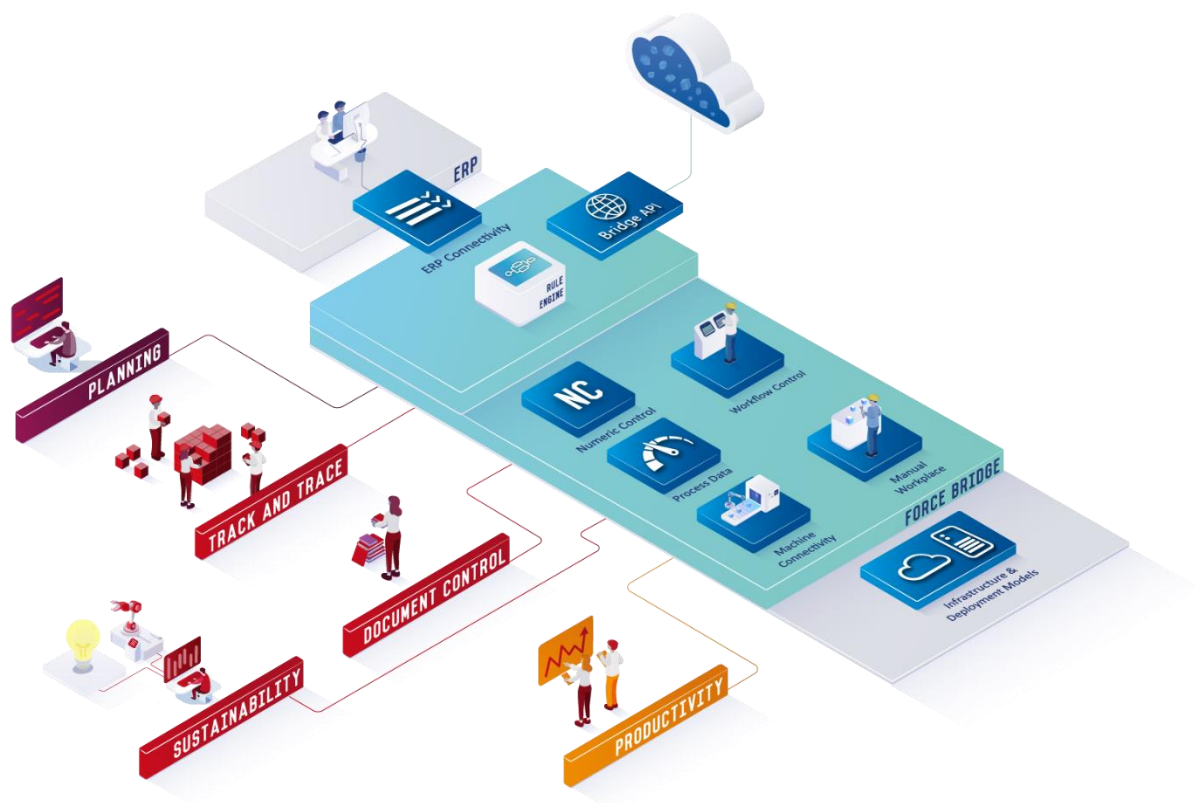
1 Overview

FORCAM provides companies with all the information they need to control and optimize their production. The modular IIoT solution FORCAM FORCE IIOT is as flexible as the needs of customers. With a variety of production apps, FORCAM helps companies to make their processes more transparent and improve their workflows. In this way, companies create the basis for optimization measures and sustainable success, thereby ensuring their competitiveness.

FORCAM is always endeavored to optimize the solution FORCAM FORCE IIOT further, to enrich it with functions, offering customers consistent growth and greatest possible use. For this purpose, several releases are published throughout the year.

This document lists functions that have been added or changed during the **5.12.16** release. It serves as an overview of the most important features to use FORCAM FORCE IIOT in the best possible way.

Detailed descriptions of the individual functions can be found in the respective product documentation.



2 FORCAM FORCE IIOT COMMON

2.1 Productification SSO & FFAUTH

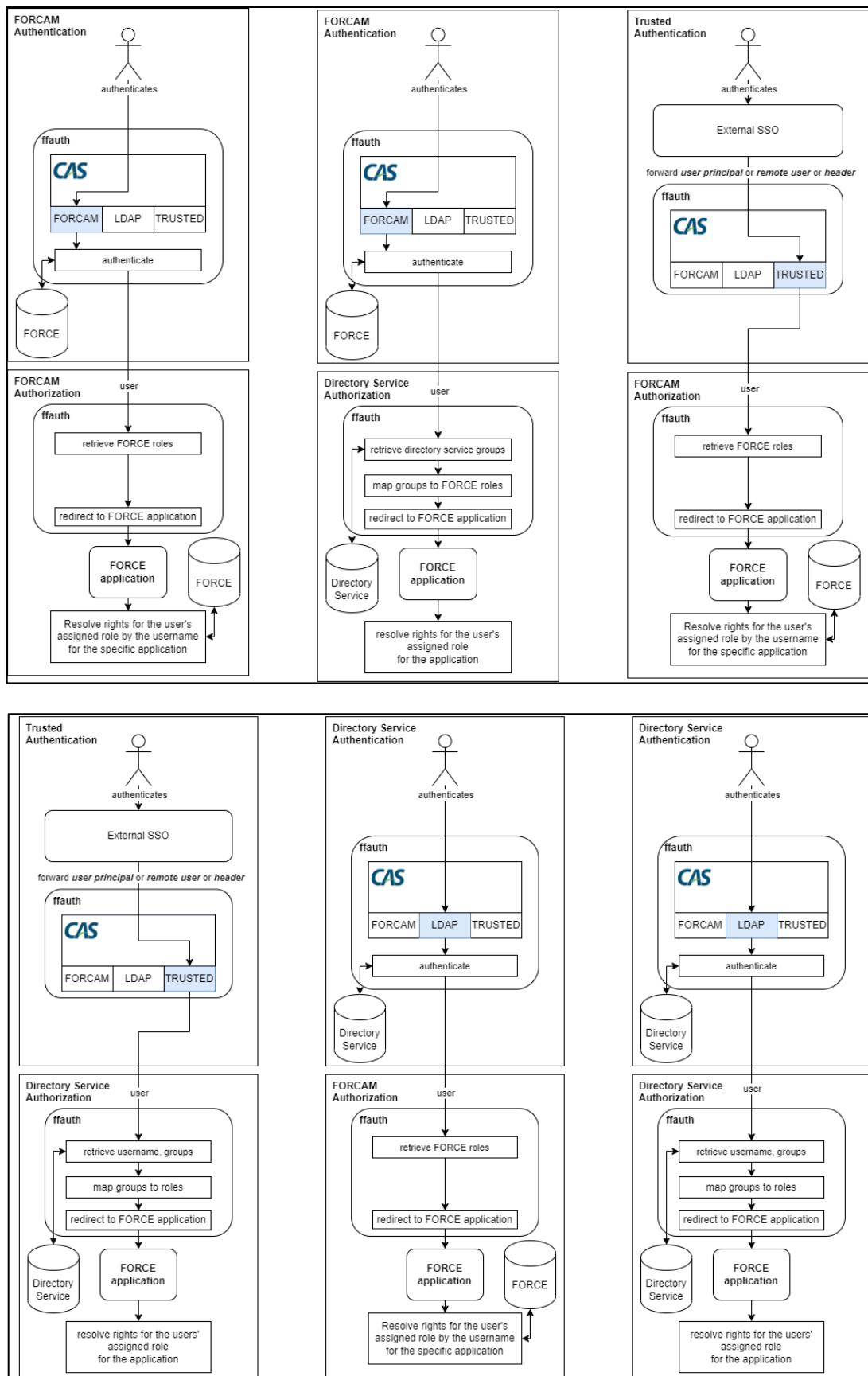
Affected module	Affected area	Status
FFAuth	FFAuth	New/Changed

FFAuth

The following combinations of Authentication and Authorization are supported:

- **FORCAM Authentication and FORCAM Authorization:**
The user is authenticated and authorized against the FORCAM FORCE database (No external authentication or authorization, everything is handled by the FORCAM FORCE applications)
- **FORCAM Authentication and Directory Service Authorization:**
The user is authenticated against the FORCE database and is authorized by mapping the Directory Service groups to FORCAM FORCE roles.
- **Trusted Authentication and FORCAM Authorization:**
The user is authenticated against an external SSO service and is authorized against the FORCAM FORCE roles.
- **Trusted Authentication and Directory Service Authorization:**
The user is authenticated against an external SSO service (e.g., Kerberos, SiteMinder, etc.) and is authorized by mapping the Directory Service groups to FORCE roles.
- **Directory Service Authentication and FORCAM Authorization:**
The user is authenticated against a Directory Service and is authorized against the FORCAM FORCE roles.
- **Directory Service Authentication and Directory Service Authorization:**
The user is authenticated against a Directory Service and authorized by retrieving the associated groups that are mapped to FORCAM FORCE roles.

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- ⚠ The former LDAP/AD integration is not supported anymore and must be migrated to the new solution.
- ℹ The username is not changed to upper case in the Login UI anymore because usernames might be case sensitive in external SSOs. However, if you log in with a FORCAM user it doesn't matter if you write the username in upper case or not. (It will always be converted to upper case internally)

The following new properties are used for the different flows:

FORCAM

Authentication

No configuration is necessary.

Authorization

No configuration is necessary.

ℹ **Fallback Mechanism**

Both FORCAM authentication and authorization are used as fallback, should the preferred mechanism fail.

Trusted

Authentication

Users are authenticated via a Single-Sign-On solution (e.g., Kerberos, SiteMinder, etc.) provided by the customer. Therefore, a user principal, remote user header or custom header is sent to FFAuth. If this method is chosen, the customer has to assure the secure communication between the SSO solution and FFAuth.

Optionally, if a custom header is sent containing the users' logon name, then the headers name has to be configured accordingly. In addition, a logout URL can be defined optionally, which FFAuth uses to redirect the user after logout. If no logout URL is configured the user is redirected back to the FFAuth logout page which ends all sessions created by FORCE applications.

Directory Service

Multiple Directory Service can be configured. Each configuration will be considered for the authentication or the authorization flow, if so desired.

Furthermore, each directory service config can have multiple directory service URLs which can be specified as fallback. These are used one after the other if no connection can be established with the currently iterated URL. Therefore, note that the order is important. These directory services must also be identical to each other in terms of structure, content and type.

The type can either be LDAP which is a directory service using the established industry standard or AD for Microsoft's Active Directory solution.

A configuration contains the following fields:

Field	Example	Remarks
Bind DN	cn=admin,dc=example,dc=com	The object to bind to the LDAP that grants you authorize permissions. If the bindDn and bindCredentials are left empty, an anonymous bind is performed.
Bind Credentials	*****	The credentials used for the bind DN.
LDAP URL	ldap://localhost:389	URL to the directory service.
Type	Microsoft Active Directory LDAP	Use Microsoft Active Directory if the user is to be authenticated against a Microsoft AD or LDAP if the user is to be authenticated against a directory service which uses the standard Lightweight Directory Access Protocol.

Authentication

The directory services are iterated in order, and the first directory service against which the user can be successfully authenticated will be used.

Field	Example	Remarks
Bind DN	ou=Users,dc=example,dc=com	The starting point of a search.
Password Encoder Type	DEFAULT	One of these values. Used to hash the user's password input, which is then matched against the password stored in the directory service. Available values are as follows: <ul style="list-style-type: none"> — DEFAULT — STANDARD — BCrypt — SCrypt — PBKDF2 — SSHA — GLIB_CRYPT
Password Encoder Encoding Algorithm		Only relevant if DEFAULT or GLIB_CRYPT as password encoder type is selected.
Search Filter	(&(cn={user}))(objectClass=inetOrgPerson)	{user} is a placeholder for the users' logon name provided by the user through the UIs login mask. This filter has to return a single unique DN.


Authorization

This mechanism resolves the user's associated directory service groups and maps them to FORCAM FORCE roles, which in return grants them the role permissions for a specific application.

In order to use this functionality, a corresponding search filter must be defined, which returns the groups of a user. In addition, the attribute containing the group name must be named.

For example:

Field	Example	Remarks
Bind DN	ou=Users,dc=example,dc=com	The starting point of a search.
Search Filter	(&(objectClass=groupOfNames)(member=uid={user},ou=Users,dc=example,dc=com))	{user} is a placeholder for the users' logon name provided by the user through the UIs login mask. This DN has to return a single unique DN.
Group Attribute Name	cn	The attribute containing the group's name.

 These values are most likely different for each customer system

Mapping of external groups to FORCE roles and constraints

Every external group is mapped to a FORCAM role with additional workplace hierarchy constraints. How the mapping is done can be configured in the workbench under Configuration - System - Single sign-on (SSO) - LDAP Naming Schema:

<i>Prefix Regex (Leave Empty for No Prefix)</i>	PRE_
<i>Role Name Regex</i>	\w{4,4}
Default Hierarchy Code	3
▼ Hierarchies	☰ (1) List elements
▼ Hierarchy	^ v
<i>Hierarchy Code Regex</i>	\w{1,1}
▼ Hierarchy Nodes (ordered as hierarchy levels)	☰ (4) List elements
▼ Hierarchy Node	^ v
Hierarchy Node Mnemonic Regex	\w{2,2}
▼ Hierarchy Node	^ v
Hierarchy Node Mnemonic Regex	\w{3,3}
▼ Hierarchy Node	^ v
Hierarchy Node Mnemonic Regex	\w{4,4}
▼ Hierarchy Node	^ v
Hierarchy Node Mnemonic Regex	\w+

Field	Example	Remarks
Prefix Regex	PRE_	External group prefix which can be ignored when mapped. Can be empty.
Role Name Regex	\w{4,4}	The regex which is used to parse the FORCE role name
Default Hierarchy Code	3	The default hierarchy code which is used if no Hierarchy Code Regex is defined and the hierarchy code is not part of the external group
Hierarchy Code Regex	\w{1,1}	Optional regex which is used to parse the hierarchy code out of the external group
Hierarchy Node Mnemonic Regex	\w{2,2}	Optional regex to which is used to parse a hierarchy node mnemonic out of the external group. The hierarchy node mnemonics are then used to build a path to a specific hierarchy node.

Given the configuration in the above screenshot:

- When mapping the external group PRE_role12233344445
Then the result will be a FORCE role with the name role and a workplace hierarchy node in the hierarchy with code 1 with the path /22/333/4444/5 as constraint
- When mapping the external group PRE_role6
Then the result will be a FORCE role with the name role and the workplace hierarchy root nodes in the hierarchy with code 6 as constraint
- When mapping the external group PRE_role2233344445
Then the result will be a FORCE role with the name role and a workplace hierarchy node in the hierarchy with code 3 with the path /22/333/4444/5 as constraint

Prefix Regex (Leave Empty for No Prefix)	PRE_
Role Name Regex	\w{4,4}
Default Hierarchy Code	3
▼ Hierarchies	☰ (1) List elements
▼ Hierarchy	^ v
Hierarchy Code Regex	

Given the configuration in the above screenshot:

- When mapping the external group PRE_role
Then the result will be a FORCE role with the name role and the workplace hierarchy root nodes in the hierarchy with code 3 as constraint

Configure retrieval of Emails via Directory Services

FFNewOffice uses emails for automated sending of reports and alarming mails, as well to create email groups that can be used in the before mentioned features. For the email addresses of a directory service to be displayed in FFNewOffice, they must be configured. If this feature is not used, only the FORCE user emails are displayed for selection. The manual input of external emails is still possible.

Field	Example	Remarks
Bind DN	ou=Users,dc=example,dc=com	The starting point of a search.
Search Filter	objectClass=inetOrgPerson	
Username Attribute Name	uid	The attribute containing the user's logon name.
Mail Attribute Name	mail	The attribute containing the user's mail address.

Additional Properties

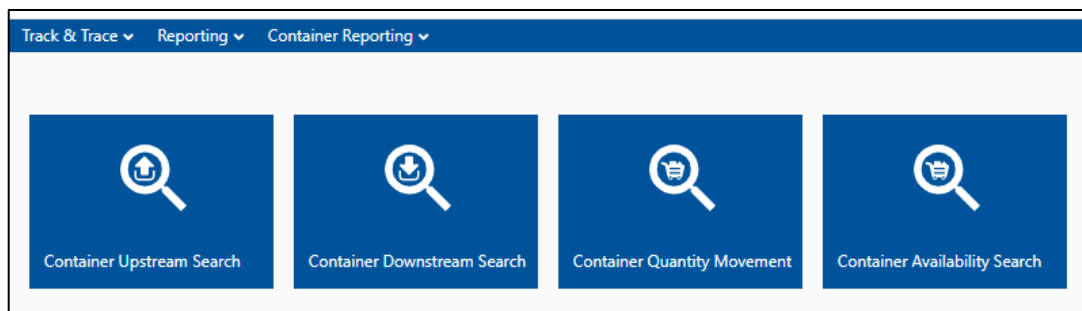
It is possible to disable web sockets by configuring the following property via FFSetup. Instead, a long polling mechanism used. This might be necessary if a proxy is used which does not support websockets.

2.2 Container Availability Report

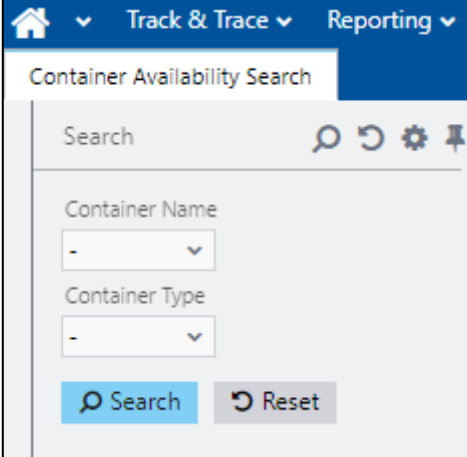
Affected module	Affected area	Status
FFNewoffice	Container Reporting	New

Container Reporting

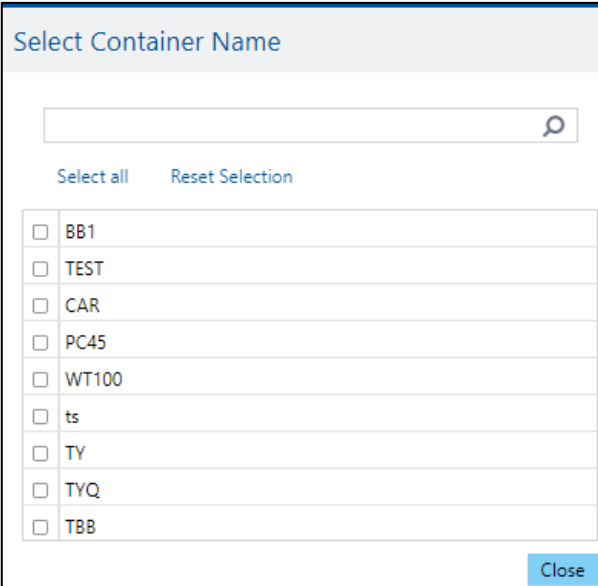
A new tile is available to search the container status under Track & Trace → Reporting → Container Availability Search



A user can search the container status based on the Container Name (which configured under the container configuration) and based on container type. These two search criteria's are not mandatory both are optional. User can search either one, both or none.



- **Container Name:** It is a selection box where user will see all the container configuration. User can select one or many.



- **Container Type:** it is also a selection box with single or multiple selection. It show all different types of containers

Select Container Type

Select all Reset Selection

<input type="checkbox"/>	Production
<input type="checkbox"/>	Quality
<input type="checkbox"/>	Compliance
<input type="checkbox"/>	Group
<input type="checkbox"/>	Commission
<input type="checkbox"/>	Single Piece Container
<input type="checkbox"/>	Inventory Container

Close

On the search result, a user can see the container information based on the container name, container mnemonic and container type. This result view represents that under one configured container name how many containers are there and how many are available or occupied and the percentage of available containers.

Search Results						
Container Name	Container Mnemonic	Container Type	Total Containers	Occupied Containers	Available Containers	Availability %
BB1	BB1	Production	197	119	78	39.5939 %
AB	AB	Production	1	1	0	0.0000 %
PROD	PROD	Production	1	1	0	0.0000 %
WT100	WT100	Production	130	51	79	60.7692 %
CAR	CAR	Production	20	3	17	85.0000 %
TEST	TEST	Inventory Container	178	173	5	2.8089 %
PC2	PC2	Production	57	19	38	66.6666 %

A user can also see the details of each container by selecting the row, with right click option container details. This opens a new window with details of each container.

Search Results						
Container Name	Container Mnemonic	Container Type	Total Containers	Occupied Containers	Available Containers	Availability %
BB1	BB1	Production	197	119	78	39.5939 %
AB	AB	Production	1	1	0	0.0000 %
PROD	PROD	Production	1	1	0	0.0000 %
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CAR	CAR	Production	20	3	17	85.0000 %
TEST	TEST	Inventory Container	178	173	5	2.8089 %
PC2	PC2	Production	57	19	38	66.6666 %

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This view contains the information regarding the container id, tracking number, total quantities, registered workplace, registered order/operation and the container status.

- If a container has the quantities > 0 that means that container is already occupied means that container is in use by some process.
- If a container doesn't have quantities but it is registered on any order/operation of any workplace, then also it consider as occupied.
- The container comes under available status if it doesn't have any quantities and not registered on any order/operation of workplace.

Container Details					
Container Name		Container Mnemonic		Container Type	
BB1		BB1		Production	
Container	Tracking Number	Total Quantities	Registered Workplace	Order/Operation	Container Status
Test003	8d5972d04a4111e9bb5ddc7d0a30719c	2.0000	-	-	Occupied
BB1JV	b84a2e40b4e111e7a87def400a00000f	0.0000	WP-Standard-09	1001000101/00	Occupied
RAJ001	2ad686b04a4211e9a6b2dc7d0a30719c	60.0000	-	-	Occupied
K1	2e6182304a4211e9c11edc7d0a30719c	100.0000	-	-	Occupied
K2	2e75cd804a4211e9c193dc7d0a30719c	100.0000	-	-	Occupied
RAJ002	2ffc6d804a4211e9905cdc7d0a30719c	11.0000	-	-	Occupied
RAJ004	30af69d04a4211e9a726dc7d0a30719c	7.0000	-	-	Occupied
C7327	31cd84004a4211e9824bdc7d0a30719c	36.0000	-	-	Occupied
C7328	32111cb04a4211e99b5fdc7d0a30719c	5.0000	-	-	Occupied
C7329	323016604a4211e9bc14dc7d0a30719c	495.0000	-	-	Occupied
C928738	33430d004a4211e9affcdc7d0a30719c	20.0000	-	-	Occupied
I7265	a645e4902de111e8aab3c9400a00000f	62.0000	-	-	Occupied
I8765	e8f1e7f04a4411e98e01c12f0a30719c	10.0000	-	-	Occupied
I8888	673313d0326011e88082de820a00000f	73.0000	-	-	Occupied
Q666	ea0aaaf04a4411e9cfa8c12f0a30719c	3.0000	-	-	Occupied
Q876	ea36c4004a4411e99240c12f0a30719c	3.0000	-	-	Occupied
Q877	ea5150e04a4411e993d2c12f0a30719c	3.0000	-	-	Occupied
Qaaa	efc4e2804a4411e98673c12f0a30719c	2.0000	-	-	Occupied
IC-001	88246b803cdc11e8cbd4c8cd0a00000f	120.0000	-	-	Occupied
I9282	338522f03f1011e8892ee4b40a00000f	90.0000	-	-	Occupied
QS001	54e233204a4511e9b4ecc12f0a30719c	2.0000	-	-	Occupied
QS002	54f594104a4511e99c00c12f0a30719c	1.0000	-	-	Occupied
QS003	550831b04a4511e98680c12f0a30719c	1.0000	-	-	Occupied
TMP-7672	BB1-WPL-WP-Standard-09-ORD-100100	73.0000	-	-	Occupied
ALS-002	99f59c404a4511e9c78dc12f0a30719c	200.0000	-	-	Occupied
ALS-003	13c714e0e2cc11e882cdcef60a00000f	92.0000	-	-	Occupied
TMP-8000	b7851800e91811e8825bff740a00000f	1.0000	-	-	Occupied
TMP-8111	9f8e90304a4511e9bc89c12f0a30719c	1.0000	-	-	Occupied
TMP-8177	e516d070f4ac11e880f7d7c30a00000f	100.0000	-	-	Occupied
TMP-8341	03a9cf60f4ad11e8cf04d7c30a00000f	120.0000	-	-	Occupied

Cancel

2.3 Slovenian and Serbian Language

Affected module	Affected area	Status
FFWorkbench	Localization	New

The two languages Serbian and Slovenian are available when configuring languages in the localization module. When selected they will show in the language selector. A translation for these languages is not included.

2.4 Change default system user password on initialization

Affected module	Affected area	Status
FFSetup	Database Initialization	New

When initializing the database, the user can specify a password for the SYSTEM user. This is only used for the very first installation and can only be changed through the user management in the workbench later.

2.5 Support for Windows 11 (Client)

Affected module	Affected area	Status
FFWorkbench	FFWorkbench	New

Support on Terminal (Clients) of Windows 11 Operating System is available.

3 Productivity


3.1 Extension of Activity Step “Dialog For Input Any Value” with Input Parameters

Affected module	Affected area	Status
Shopfloor Terminal	Shopfloor Terminal Configurator	New/Changed

Shopfloor Terminal Configurator: Dialog for the input of any value

Existing activity step **Dialog for the input of any value (SingleInputToParameterMapActivityStepUI)** extended to have a possibility to provide the user input as a pre-defined value. This value can be pre-defined as per below:

- **Dynamic pre-defined value:**
An input parameter (parameter name: **Dynamic Input**) containing the pre-defined value can be configured for the step.
- **Static pre-defined value:**
A static configurable value (configuration name: **Default input value**) can be configured as a pre-defined user input.

 If a dynamic value is defined, it takes precedence over the static value.

Identifier	Value
▼ Dialog for the input of any value	
Activity step name	⊕ Input a value
▸ Configuration of Execution Conditions	
▸ Sizing	
Suppression of Focus Acquisition	<input type="checkbox"/>
▼ inputparameters	(1) List Elements
Parameter Assignment	^ v Parameter (EVERY) → Dynamic Input
Output parameters	(0) List Elements
Show Messages on Local Message Bar	<input checked="" type="checkbox"/>
Input field	⊕ Input
Input Type	String
Default input value	Default
Manual input enabled	<input checked="" type="checkbox"/>
Barcode Scan Configuration	⊗ Value Object (Not Assigned)

3.2 Operation details report available as product standard

Affected module	Affected area	Status
FFNewOffice	Reporting	Changed

The standard report "Operation Details" (ID: 4ef2c8be-2875-46fd-8b8c-fbd9bf1b3309) will be split into the following reports:

- Operation Details Process
- Operation Details Time per Unit
- Operation Details Setup
- Operation Details Personnel
- Operation Details OEE
- Operation Details Quantities

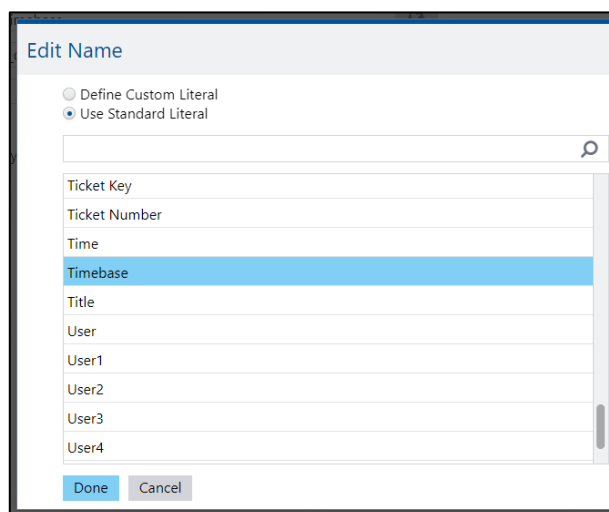
As the new reports will replace the report "Operation Details", the report "Operation Details" will be removed from the standard reports and will no longer be supported.

3.3 Transfer Filter Criteria literals to the main CSV

Affected module	Affected area	Status
FFNewOffice	Reporting	Changed

Path: Office > Performance Analysis > Reporting > Filter Criteria

In the Filter Criteria Literals, it can be selected with standard Literals which can be changed/renamed by the Literal Manager.



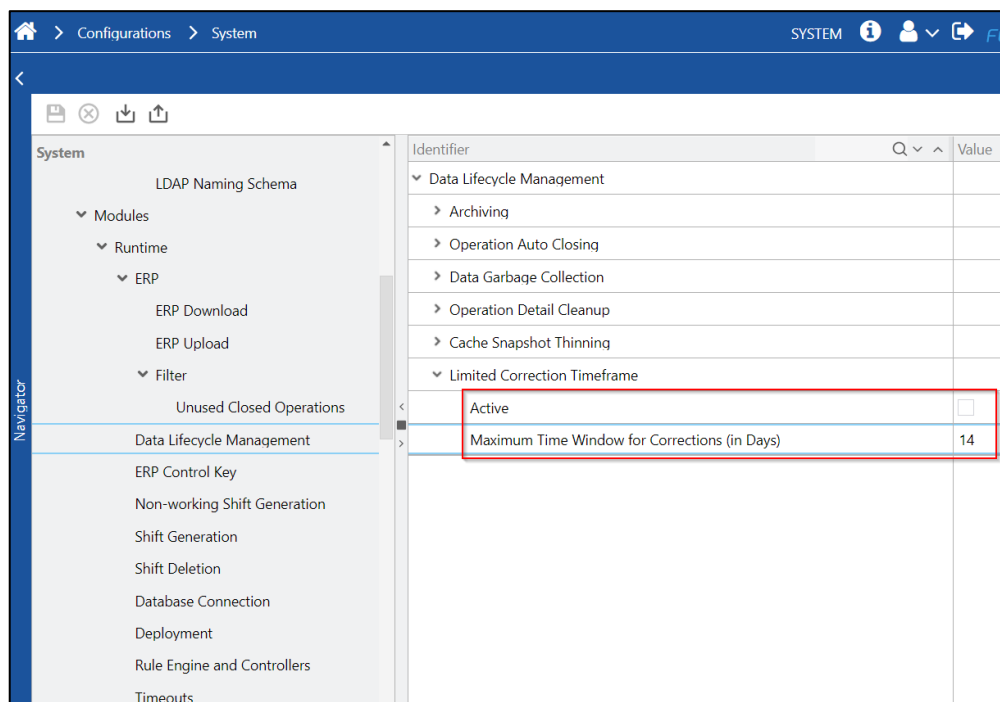
3.4 Graphical Correction Process

Affected module	Affected area	Status
FFWorkbench	Corrections	New/Changed

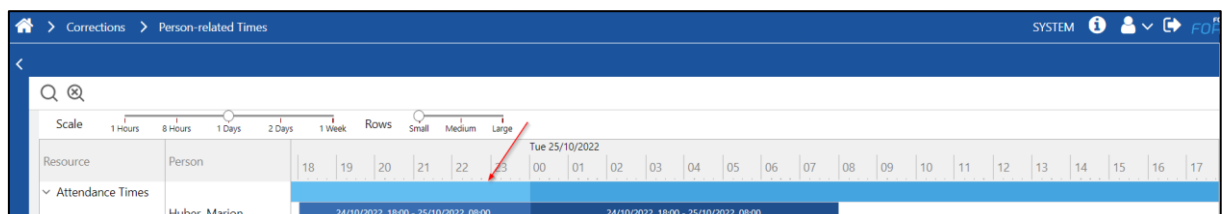
Path: Corrections > Person-related Times

It is now possible to define a valid time window for the Person-related Times correction. Attendance time and attendance break can only be corrected within this correction window.

User can configure a correction window under System configuration>Data life cycle management>Maximum time window for correction (and also set it active in System configuration)>Data life cycle management>Active.



Timelines outside the correction window are displayed in a different color.



An attendance time outside the configured correction window is only displayed in read mode. it is not possible to change the times.

Attendance Time Dialog

Person Huber, Marion

Start Time 24/10/2022 08:00:00

End Time 24/10/2022 10:00:00

Duration 02:00:00

+ -

Break Start	Break End
24/10/2022 08:30:00	24/10/2022 09:00:00

OK Cancel

Attendance Time Dialog

Person Huber, Marion

Start Time 24/10/2022 18:00:00

End Time 25/10/2022 08:00:00

Duration 14:00:00

+ -

Break Start	Break End
24/10/2022 19:00:00	24/10/2022 19:15:00
24/10/2022 23:50:00	25/10/2022 00:15:00

OK Cancel

When user tries to add or edit a attendance time and attendance break and it is outside of the configured correction window he will get an error message. It is also not allowed to delete attendance time and attendance break which are not in the correction window.

18192021222300

24/

Add Personnel Time
 Edit Personnel Time
Delete Personnel Time

Attendance Time Dialog

Person Huber, Marion

Start Time 24/10/2022 18:00:00

End Time 25/10/2022 08:00:00

Duration 14:00:00

+ -

Break Start	Break End
24/10/2022 19:00:00	24/10/2022 19:15:00
24/10/2022 23:50:00	25/10/2022 00:15:00

OK Cancel

Interrupted / ManualSeq-20016

The attendance break cannot be deleted because it is outside the correction time window.

Extended tooltip for Attendance Time

In the tooltip of attendance time interval, the following information are now visible:

- Employee No
- Production Duration ^{New} (Calculated from: Attendance time - Break times)
- Break Duration ^{New} (Sum of Break times or empty if there is no break)
- Attendance Time
- Break Times ^{New} (Only first 3 breaks will be shown)

When it is the current interval then no Production Duration is displayed and only breaks that are completed are considered for the calculation of the duration.

Huber, Marion	08/11/2022, 15:55 - 10/11/2022, 07:27	
Langner, Alina		Employee No.: 54000001 Production Duration: 36:29:21 Break Duration: 03:03:09 Attendance Time: 08/11/2022, 15:55 - 10/11/2022, 07:27 Break Time: 09/11/2022, 01:00 - 09/11/2022, 02:00 Break Time: 09/11/2022, 12:00 - 09/11/2022, 13:00 Break Time: 09/11/2022, 15:00 - 09/11/2022, 16:00
Remondis, Clara	08/11/2022,	
Schlotterheimer, Gerd		

Emergency Sign Off

Persons who are signed off by system will be displayed in separate color:

Huber, Marion	08/11/2022, 12:39 - 08/11/2022, 13:05
Langner, Alina	08/11/2022, 12:30 - 08/11/2022, 13:00

Overhead Cost Collector Times:

It is now possible to display the OCC times for correction in the Person related times page. The OCC times are displayed by graphically in the Gantt as a timeline.

The correction window is applicable to Valid from and valid to time range. But this range is overruled with configured time window.

The menu entry for the correction function is "Add Overhead Cost Times" when right clicked over the Cost center unit or the Inner order timeline.

OrderNumber-10016	Bachmann, Quentin	11/1/22, 2:01 PM - 11/5/22, 2:01 PM	INTERNAL_ORDER/OrderNumber-10016
costUnit-1001			Add Overhead Cost Times
	Abele, Hildegard	11/1/22, 8:59 AM - 11/4/22, 7:59 AM	11/1/22, 8:59 AM - 11/4/22, 7:59 AM
	Agrar, Svenja	1/22, 8:01 AM - 11/2/22, 8:01	
costUnit-1008			OVERHEAD_COST_CENTER/costUnit-1008
	Alberts, Jonah	3:03 AM - 11/5/22	11/2/22, 8:03 AM - 11/5/22, 8:03 AM
costUnit-1011			OVERHEAD_COST_CENTER/costUnit-1011
	Aguilar, Luis	11/1/22, 9:09 AM - 11/6/22, 9:09 AM	11/1/22, 9:09 AM - 11/6/22, 9:09 AM

Productivity

The Add pop up is provided for the user to add an overhead time message for this person in the past (start and end time).

Add

Overhead Cost Collector Type

Cost Center Booking

Personnel

Cost Center Booking

Internal Order Booking

Overhead Cost ERP Key

Cost Center

Time Range

11/06/2022 23:33:35

11/06/2022 23:33:35

Duration

00:00:00

Execution Cost Center

Charged Cost Center

OK

Cancel

The context menu on selection on the personnel timeline will include Add, Edit and Delete Overhead cost times.

OrderNumber-10008			INTERNAL_ORDER/OrderNumber-10008
	Andrews, Waltraut		
OrderNumber-10016			INTERNAL_ORDER/OrderNu
	Bachmann, Quentin	11/1/22, 2:01 PM - 11/5/22, 2:01 PM	11/1/22, 2:01 PM - 11/5/22, 2:01 PM
costUnit-1001			OVERHEAD_COST_CENTER/costUnit-1001
	Abele, Hildegard	11/1/22, 8:59 AM - 11/4/22, 7:59 AM	11/1/22, 8:59 AM - 11/4/22, 7:59 AM
	Agrar, Svenja	1/22, 8:01 AM - 11/2/22, 8:01	

The **Delete** option will be disabled when the timeline is in between the active and non-active correction window.

OrderNumber-10016			INTERNAL_ORDER/
	Bachmann, Quentin	11/1/22, 2:01 PM - 11/5/22, 2:01 PM	PM
costUnit-1001			OST_C
	Abele, Hildegard	11/1/22, 8:59 AM - 11/4/22, 7:59 AM	11/
	Agrar, Svenja	1/22, 8:01 AM - 11/2/22, 8:01	

costUnit-1001	Abele, Hildegard	11/1/22, 8:59 AM - 11/4/22, 7:59 AM	11/1/22, 8:59 AM
	Agrar, Svenja	11/1/22, 8:01 AM - 11/2/22, 8:01	
costUnit-1008	Alberts, Jonah		
costUnit-1011			

 User can shift the end time only after the non-active correction time. Else the user is notified with the error message.

Scale

1 Hours 8 Hours 1 Days 2 Days 1 W

Resource	Person
Attendance Times	
OrderNumber-10008	Abele, Lara
OrderNumber-10016	Andrews, Waltraut
costUnit-1001	Bachmann, Quentin
	Abele, Hildegard
	Agrar, Svenja
costUnit-1008	Alberts, Jonah
costUnit-1011	Aguilar, Luis

Edit

Overhead Cost Collector Type Cost Center Booking

Personnel Abele, Hildegard

Personnel Number 54000560

Overhead Cost ERP Key 160-D1-CA150-5349271394

Cost Center costUnit-1001

Description of overhead cost collector Costcenter1

Time Range 11/01/2022 08:59:44 11/04/2022 07:59:44

Duration 71:00:00

Mode ☒ Internal Performance Auditing ☐ Cost Center Accounting

Execution Cost Center test

Charged Cost Center test

OK Cancel

Overhead Cost Collector Booking Is Not Possible Due to Invalid/Expired Time Range

- 2023-01-19

— Overhead Cost Center Filter:

[Select all](#)
[Deselect all](#)
[Show Selected](#)
[Show All](#)

Cost Center	Description
CA150	Costcenter1
CA200	CostcenterDisabled
costUnit-1	Costcenter1
costUnit-10	Costcenter1
costUnit-100	Costcenter1
costUnit-1000	Costcenter1
costUnit-10000	Costcenter1

— Internal Order Filter:

[Select all](#)
[Deselect all](#)
[Show Selected](#)
[Show All](#)

Internal Order	User Status	Description
OrderNumber-10001	UserStatus1	InternalOrder1
OrderNumber-10002	UserStatus1	InternalOrder1
OrderNumber-10003	UserStatus1	InternalOrder1
OrderNumber-10004	UserStatus1	InternalOrder1
OrderNumber-10005	UserStatus1	InternalOrder1
OrderNumber-10006	UserStatus1	InternalOrder1
OrderNumber-10007	UserStatus1	InternalOrder1

3.5 Assembly Plan Mode Configuration

Affected module	Affected area	Status
FFWorkbench	Shopfloor Terminal	New

FFWorkbench

Assembly Plan Activity Steps:

- Now the user can configure the Assembly Plan Mode in Assembly Plan Activity Step UI and Assembly Plan background activity step by selecting the mode options.

Assembly Plan Mode	Standard
	Commissioning
	Standard
	Without Master Ppiece

- The default value is Standard on Assembly Plan Activity Steps.

Restrictions/Risks

- Once the assembly plan configuration is done on activity step then it would be applicable for all operations of all workplaces which are connected through this Activity Step SFT template.
- To configure the Assembly Plan Mode at operation user has to use the current assembly plan configuration under the workbench.
- The configured Assembly Plan Mode on Activity Step has lower priority means if there is any Assembly Plan found for the selected operation in Assembly Plan Configuration then Assembly Plan works according to configure plan in Assembly Plan Configuration.
- Re-Assembly is not supporting the function without Masterpiece.

Example: On Activity Step user configure the assembly plan mode as **Standard** but in Assembly Plan Configuration for the selected operation assembly plan mode is **Without master piece** then Assembly work as per **Without master piece mode**.

4 Platform & Connectivity

4.1 Remove Experimental API

Affected module	Affected area	Status
BridgeAPI/ERP Connectivity	BridgeAPI/ERP Connectivity	Changed

Experimental API

The Experimental APIs have been removed. As consequence they are not shown any more in the Swagger UI.

4.2 Using OPC UA alarm events

Affected module	Affected area	Status
OPC UA plugin	OPC UA plugin	New

Javis DCU/DACQ

It is now possible to use alarm events in OPC UA for error code mapping. An alarm event contains a code and a flag indicating whether the alarm is coming or going. If multiple alarms are active, the latest one applies.

5 Appendix

Abbreviation/Term	Meaning
AD	Active Directory
API	Application Programming Interface
DACQ	Data Acquisition
DCU	Data Collection Unit
DLL	Dynamic Link Library
DN	Domain Name
LDAP	Lightweight Directory Access Protocol
OEE	Overall Equipment Effectiveness
OPC UA	Open Platform Communications Unified Architecture
SSO	Single Sign-on
UI	User Interface