



IFS CLOUD

NGSM DEMYSTIFIED (25R1)

NEXT-GENERATION SERVICE MANAGEMENT

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Contents

Contents	2
Terminology	10
Getting Started.....	12
About the 25R1 Version of this Document.....	12
New Navigation Structure (25R1↗)	12
Introduction to Next-Generation Service Management (NGSM) (25R1↗).....	13
Similarities and differences.....	14
Request Management.....	16
Request.....	16
Request Classification Basic Data (25R1↗)	16
Request Services/Scope (25R1↗).....	17
Request Tasks	20
Request Process	21
Request Initiation (25R1↗)	21
Appointment Booking (25R1↗)	25
Request Enrichment	26
Assignment of Service Contractors (25R1★)	26
Change of Service Organization (25R1★)	26
Request Quotes	28
Request Dispatch	29
Transfer Task to Mobile (MWO)	30
Request Execution	32
Request Invoicing/Closing (25R1↗).....	33
One Time Generation of Invoice Previews (25R1★)	38
Request Status Handling (⌚)	40
Request creation from Customer Orders (25R1★)	41
Project Connection to Request (25R1★)	42
Connect Request and Project Activity (25R1★)	42
Connect Multiple Project Activities to Request Scopes (25R1★).....	46
Pre-Posting on Request Scopes (25R1★)	47
Call Center Handover (25R1★)	48
Supporting Call Center Business Objects (25R1★).....	49
Support Keys (25R1★)	49
Task Activities for Requests (25R1★).....	50
Case Task Templates (25R1★)	51
Global Solutions (25R1★).....	51
Create Request from Case (25R1★)	52

First Time Fix Prediction (FTFP) ⚡ (25R1★).....	54
Setup First Time Fix Probability (25R1★)	55
Visualize First Time Fix Probability (25R1★).....	56
Bundle Tasks	60
Concept.....	60
Create a Bundle Task (25R1↗)	62
SLAs on Bundle Tasks	64
Schedule a Bundle Task.....	64
Report Time	65
Report Manual Transaction/Expenses.....	66
Issue Material.....	68
Return to Inventory.....	68
Bundle Tasks in MWO.....	68
Request Contracts	70
Request Contract	70
Request Contract Statuses.....	71
Price Rules.....	71
Contract Lines	73
Contract Line Examples	74
Labor Based on List Price, Material for Free	74
Labor Based on Cost, Material Using List Price	76
Auxiliary Material Free of Charge, Material Discounted.....	77
Customer-individual Parts Pricing	78
Fixed Price for the Entire Service.....	80
Contracts and Recurring Services	80
Request Contract Quotes	82
Service Organizations, Access Groups, and Resources	84
Concept.....	84
Service Organization (25R1↗)	85
Access Control	87
Concept (25R1↗).....	87
Access Handling (25R1↗)	88
Access to Requests	90
Access to Task and Pickup Tasks.....	91
Access to Dispatch Console	92
Selection Rules (25R1↗).....	92
Selection Rules for Service Organizations (25R1↗).....	93
Selection Rules for Service Contractors (25R1★).....	94
Selection Rule Types (25R1★).....	95

Resources	97
Resource Costing	97
Service Contractor Management (25R1↗)	100
What's new and what's coming? (25R1↗)	100
Concept (25R1↗)	100
Contractor Creation (25R1↗)	101
Contractor Agreements (25R1*)	104
Contractor Onboarding (25R1*)	107
Contractor Selection Rules (25R1*)	108
Contractor Execution & Reporting (25R1*)	111
Contractor Purchasing & Invoicing (25R1*)	114
SLA Management	116
Concept.....	116
Define SLA Templates (25R1↗)	117
SLA Template Revision Handling	119
Apply SLA Templates	121
SLA Commitments	122
SLAs on Bundle Tasks	124
SLA Commitment Status and Progress	126
SLA Commitments for Scheduling	126
Multiple Template Lines for the Same Event (✍)	129
SLA Commitments in MWO	132
SLA Visualization	133
SLA Management APIs	134
Service Catalog and Standard Tasks	136
Standard Tasks (25R1↗)	136
Activity Types	139
Service Types (25R1*)	141
Service Catalog (25R1↗)	141
Recurring Services.....	144
Concept.....	144
Recurring Service Programs.....	144
Calendar-based Recurring Service Programs	146
Usage-based Recurring Service Programs	147
Combined Recurring Service Programs	148
Recurring Scopes.....	148
Cycle Patterns	151
Program Activation and Request Generation	153
Recurring Service Packages	155

Request Contract for Recurring Services.....	155
Location data	157
Concept.....	157
Locations.....	157
Geocoding Quality.....	159
Location Scheduling Settings	160
Location Types.....	162
Localities	162
Location Regions.....	163
Task Location.....	164
Geocoding on Address Updates	166
Availability Patterns.....	167
Define Availability Patterns.....	168
Specify Availability.....	168
Specify Availability Patterns.....	169
Skills	171
Define Skills	171
Skill Types.....	173
Skill Templates	174
Translating Skills	174
Apply Skills to a Resource.....	176
Apply a Skill to a Crew.....	178
Skill Demand	179
Skills on Standard Tasks.....	180
Skills on Locations	180
Skills for Object Family/Subfamily	180
Skills for Models.....	181
Skills for Service Objects	181
Skills for Activity Types	182
Skills for Request Tasks.....	182
Skill Requirements for Resource Groups	183
Miscellaneous Resource Allocations	184
MRA - Misc. Resource Allocations (25R1↗).....	184
Recurring MRA - Misc. Resource Allocations (25R1★)	187
Product Structure (25R1↗)	190
Brand	190
Object Families.....	191
Models (25R1↗).....	192
Model/Part Connection	195

Inheritance of Service Attributes	196
Service Bill of Material (25R1*)	197
Concept	197
SBOM Groups (25R1*)	197
Define a Service Bill of Material (25R1*)	198
Create Service Objects based on SBOM (25R1*)	200
Service Object	202
Functional and Serial Objects	202
Service Object vs. Equipment Object	204
Asset Condition Recording	205
Create Service Object from a Customer Order (25R1↗)	207
Warranties (25R1↗)	209
Warranty Type Templates (25R1↗)	209
Customer Warranty Type Templates (25R1↗)	209
Supplier Warranty Type Templates (25R1↗)	210
Warranty Conditions (📝)	211
Warranty Assessments (25R1*)	212
Part Warranties (25R1↗)	213
Service Object Warranties (25R1↗)	214
Warranties with Sales Orders (25R1↗)	215
Warranties with Purchase Orders (25R1↗)	215
Warranties on Requests (25R1↗)	216
Warranties on Request Scopes/Services (25R1↗)	217
Warranties on Request Tasks (25R1↗)	217
Warranty Handling in MWO (25R1*)	218
Knowledge Management ⚡ (25R1*)	219
Concept (25R1*)	219
Knowledge Management Setup	220
Article Categories (25R1*)	220
Article Types (25R1*)	221
Approval Templates (25R1*)	221
Article Templates (25R1*)	222
Structure of AI Generated Article (25R1*)	223
Generate Knowledge Article from Request Work Task ⚡ (25R1*)	224
Manual Creation of Knowledge Articles (25R1*)	226
Generate Article Summary ⚡ (25R1*)	227
Using and Rating Articles (25R1*)	227
Structured Failure Management	229
Concept	229

Item Class	229
Functions.....	230
Fault Types	231
Symptoms and Causes	231
Corrective Actions	232
Use and Analyze SFM Data	233
Known Limitations	235
Service Notes	236
Template Definition (25R1↗).....	236
Service Note Template Translation (25R1✳).....	237
Service Notes in Web Client.....	240
Service Notes in MWO	241
Event Management.....	243
Concept.....	243
Events Setup	244
Event Types.....	244
Event Definitions.....	244
Event Entity Configurations.....	245
Event Reasons	246
Event Handling	246
Event Handling in MWO	248
Events Archiving and Purging.....	249
Archive Event Log.....	249
Restore Event Log	250
Purge Event Log	250
Portals (✎)	252
Time Zone Management in NGSM.....	253
Time Zone Management on Requests.....	253
Time Zone Management on Request Tasks	254
Time Zone Inheritance for Resources.....	255
Time Zone Visualization of Shift Information.....	255
Time Zone Support in MWO	258
Time Zones in Search	260
Time Zones in Dispatch Console.....	262
Time Zones in PSO	263
General IFS Cloud Capabilities	265
Translations.....	265
Audit Trail/History Log	267
Data migration using the Excel Add-in.....	268

Install the Excel Add-in	268
Allow the User to Access Migration Jobs	269
Create the Migration Job.....	269
Generate Excel Add-in.....	270
Run the Excel Add-in	270
Approvals	271
Step 1 – Enable the Entity for Approvals.....	271
Step 2 – Create an Approval Template	272
Step 3 – Determine how the Approval is associated to the Entity.....	273
Step 4 – Create the BPA Workflow	274
Step 5 – Create the BPA Workflow Triggers	276
Step 6 – Test the Scenario.....	278
Custom Streams Notifications (📝)	279
Object Properties (📝)	281
Integration APIs	282
Request Management Integration APIs	282
Request API.....	282
Request Work Task API.....	283
Location API	284
Map Position API	285
Resource Management Integration APIs	286
Overview and unique identifiers	286
Miscellaneous Resource Allocations API	286
Resource Shift API.....	287
Resource Shift Type API.....	288
Resource Shift Pattern Template API.....	289
Schedule Events API	290
Resource API.....	290
Appointment Booking Integration API	291
Appointment API.....	291
Service Contractor Integration APIs (25R1*).....	291
Contractor Management Integration APIs (25R1*)	291
Contractor Agreement Integration APIs (25R1*).....	292
External Request Work Task API (25R1*).....	293
Appendix.....	295
BPMN of the Approval BPA Workflow	295

25R1★ Functionality was newly introduced in 25R1.

25R1↗ Functionality was improved in 25R1.

✎ Chapter was added/modified in this release of the document.

📁 Navigation path in web client

🌟 Feature is supported by AI.

Terminology

IFS Cloud term	Description
Access Group	Access Groups provide view access for Requests and related entities. See Access Control .
EAM	Enterprise Asset Management. Mainly refers to asset-related functionality in IFS Cloud, which is also used by ESM and NGSM.
ESM	Enterprise Service Management i.e., the service management capabilities inherited from IFS Apps, mainly around asset maintenance.
NGSM	Next-Generation Service Management, a rather internal term used to distinguish the new development around requests from the existing capabilities around work orders (ESM).
No Part	Sometimes also referred to as a "write-in" product, a no part typically refers to a product that is not listed in a predefined catalog, inventory, or form but can still be requested or ordered by a customer.
PM/PPM	(Planned) preventive/preventative maintenance or scheduled maintenance i.e., service that was planned ahead of time, typically based on a calendar cycle (e.g., quarterly) or usage (e.g., every 1,000 operating hours).
Request	The Request exist throughout the end to end flow of the service process. Requests can be initiated from different sources and by different persons(roles) such as call center agent or technician who is at the customer's site and creates a request on behalf of the customer etc.
Request Management	Request Management is the process of handling service requests received from the customers. The process mainly contains four phases: <ol style="list-style-type: none"> 1. Request initiation 2. Dispatch 3. Execution & Reporting 4. Invoicing & Closure
Request Scope	Scope of the request. Scope contains the service and the service object. Contract, pricing and SLA are also applied on the scope. See Request Services/Scope .
Service/Service Catalog	Service Catalog (25R1P) is a concept to maintain a list of services offered by the service provider. These Services will be connected to the Request as Scopes when you create the Request. Service can be defined as a 'Service group' or 'Service item' to arrange the services as a structure for administration purpose.
Service Delivery Unit	An (optional) sub-group of a Service Organization.
Service Organization	The organization that provides services to a customer. Service organizations could be aligned to regions, to product families, etc. See Concept .
Service User Group	Renamed to "Access Groups" in 24R1.
SFM	See Structured Failure Management .
SLA	Service Level Agreement. See SLA Management .

IFS Cloud term	Description
Standard tasks	Used to predefine the execution of Services. See Standard Tasks .

Getting Started

About the 25R1 Version of this Document

This document describes changes and additional capabilities related to Service Management (NGSM) in IFS Cloud 25R1. People with experience in 24R2 should focus on chapters marked with 25R1★ and 25R1↗.

Chapters with ✎ provide new or additional details for features that were already available in previous releases.

To clearly point out where something can be found in the application, navigation paths are now highlighted with 📁 *path to page*. They have also been aligned with the **New Navigation Structure (25R1↗)**.

Features that rely on AI are marked with ⚡.

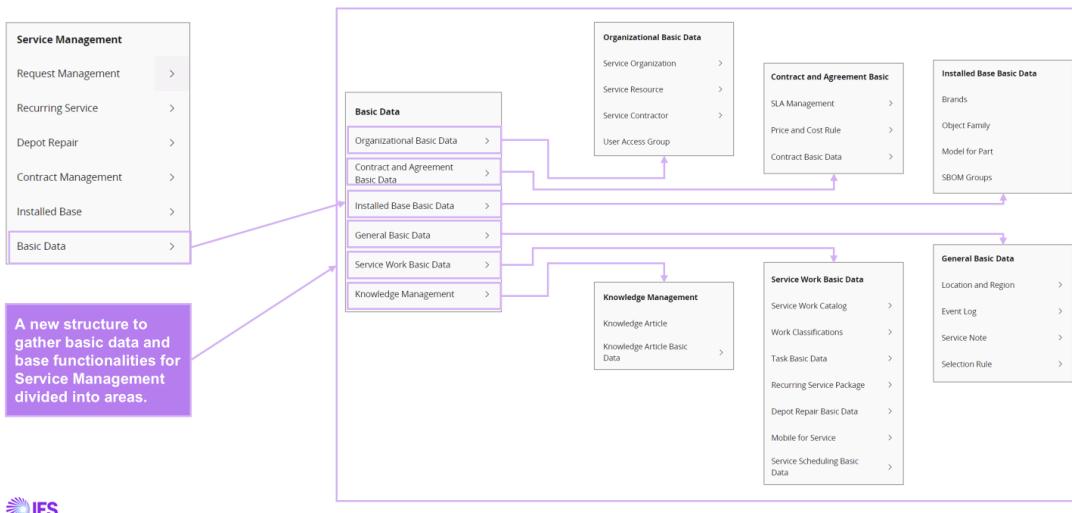
IFS Cloud newcomers will also find explanations of some common platform capabilities.

New Navigation Structure (25R1↗)

With 25R1 the navigation structure has been reconsidered, and one larger common *Basic Data for Service Management* node ensures that all users can easily find and access essential features. The new standard creates familiarity and consistency within the product for quicker and more efficient access to essential features.

Request Management: New Navigation Structure

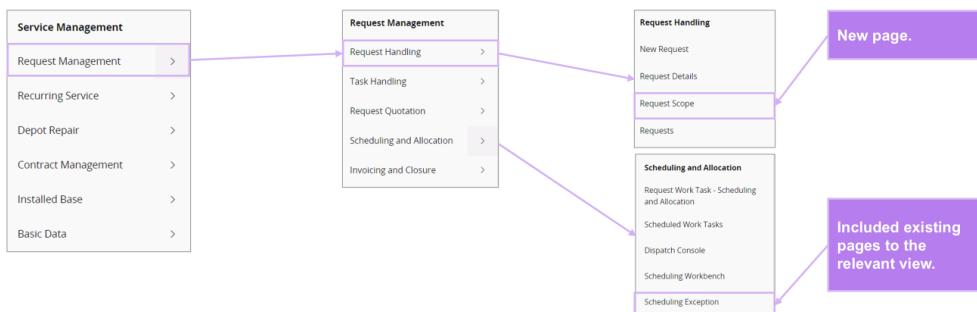
New Basic Data Structure



Request handling pages were re-arranged:

Request Management: New Navigation Structure

New page structure for Request Management



Note: This document may occasionally still refer to the “old” navigation structure, this will be fixed case by case.

Introduction to Next-Generation Service Management (NGSM) (25R1↗)

While the primary focus of Enterprise Service Management (which was already available in Apps 8/9/10) was the service of company-owned equipment, NGSM was developed to better support customer service processes, remove unneeded complexity, and address additional scenarios (such as offering a service for a generic model, not a serialized asset, which is often required in B2C scenarios).

NGSM re-uses existing IFS Cloud functionality, enhances existing capabilities, and adds new features. The following lists show some examples.

Used as-is:

- Calendars
- Certificates, competencies
- Parts
- Structured Failure Management (SFM)
- Surveys
- Material handling
- Crews

Enhanced:

- Work Task
- Pick-up Task
- Service Object 360
- Resource management, scheduling (Dispatch Console and PSO)
- Technician Workflow (Configuration)

- Warranties

New:

- Request
- Request Contract
- Service Catalog
- Standard tasks (re-use existing concepts, but re-designed)
- Urgencies
- Service Organizations
- Recurring service
- Family and model
- Skills
- Availability patterns
- Service Level Agreements (SLAs)
- Activity Types
- Service Notes
- Events

Similarities and differences

	Enterprise Service Management (ESM)	Next-Generation Service Management (NGSM)
Focus	Focus on equipment and maintenance	Focus on customers and resolving their issues
Customer	Work Orders optionally associated to customer	Request customer is mandatory
Equipment	Functional Object or Equipment Object are optional	<p>Service Object (of type Functional or Equipment) is optional.</p> <p>Functional Service Objects do not require object levels.</p> <p>Request can also be linked to a Model only, important for B2C</p>
Spare parts	Legacy spare parts handling was built to handle spare parts on one site.	New spare parts handling is designed to handle spares independent of sites and types of parts.
Scope	Concept does not exist	Every Request needs to have at least 1 Scope. Scope requires selection of a Standard Service from the Service Catalog.

	Enterprise Service Management (ESM)	Next-Generation Service Management (NGSM)
Work breakdown	1 Work Order with 1..n Work Tasks	1 Request with 1..n Request Scopes, each one with 0..n Request Tasks
Work definition	Work Task (based on JtTask entity)	Request Task (based on JtTask entity)
Work type	Work Type	Activity Type (with additional support for skills and availabilities)
Work templates	Work Task Templates	Standard Services from Service Catalog
Work Location	Retrieved from equipment	Customer or equipment location. Change on Request level can be populated to all associated tasks
Preventative maintenance	PM Actions, Programs, Groups, Replacement	Recurring Services. More flexibility around defining recurrence patterns, less flexibility for combining calendar-based and condition-based triggers.
SLAs	Uses the ESM SLA model. Only possible using service contracts	Uses the new NGSM SLA model (see SLA Management). Can be associated to Standard Tasks in the Service Catalog. Customers can choose an urgency level that uses a different SLA.
Resource Management	Both ESM and NGSM use the same capabilities	
Visibility	Work Order visibility constrained by site	Request visibility constrained by Service Organization, site only required for complementary processes such as sales or logistics. See also Access Control .

Request Management

Request

Request Management is the process of handling service requests received from the customers. The process mainly contains the phases request initiation, dispatch, execution & reporting, invoicing & closure. A request is somewhat similar to a work order, but with reduced complexity.

Requests are created based on service(s) from the service catalog. These services in turn contain one or multiple work tasks that reflect the actual execution of the service by one or multiple resources. When designing the Request entity (as opposed to re-using the Work Order entity), the goals included:

- Simple and quick request initiation, where the call taker can provide the customer with price and delivery estimates, etc.
- Dispatch can be done without the need for preparation of the work tasks or material sourcing
- Creation of work tasks with enough details (steps, demands, etc.) to allow for a first visit fix.
- Creation of a customer invoice without manual adjustments before it is sent.
- Elimination of handover needs, for example, when a request is released, it will be automatically dispatched to a resource and after execution the invoice preview is automatically created, and an invoice sent.

Creation of requests is not restricted, and any user can create and view a request for any service organization. However, as the service associated with the request has tasks, the user needs to have access to the task site. Access to a service request does not include permissions to access details such as account, equipment, or work tasks. See chapter below for [Access Control](#).

The Request itself only holds some overarching attributes, such as customer, location, SLA, owner, and urgency. Most of them act as default values while creating associated request scopes.

Request Classification Basic Data (25R1↗)

 [Service Management>Basic Data> Service Work Basic Data>Work Classifications](#)

Requests can be classified in a number of ways. All attributes can be used for grouping and classification purposes, some have an impact on the following processes.

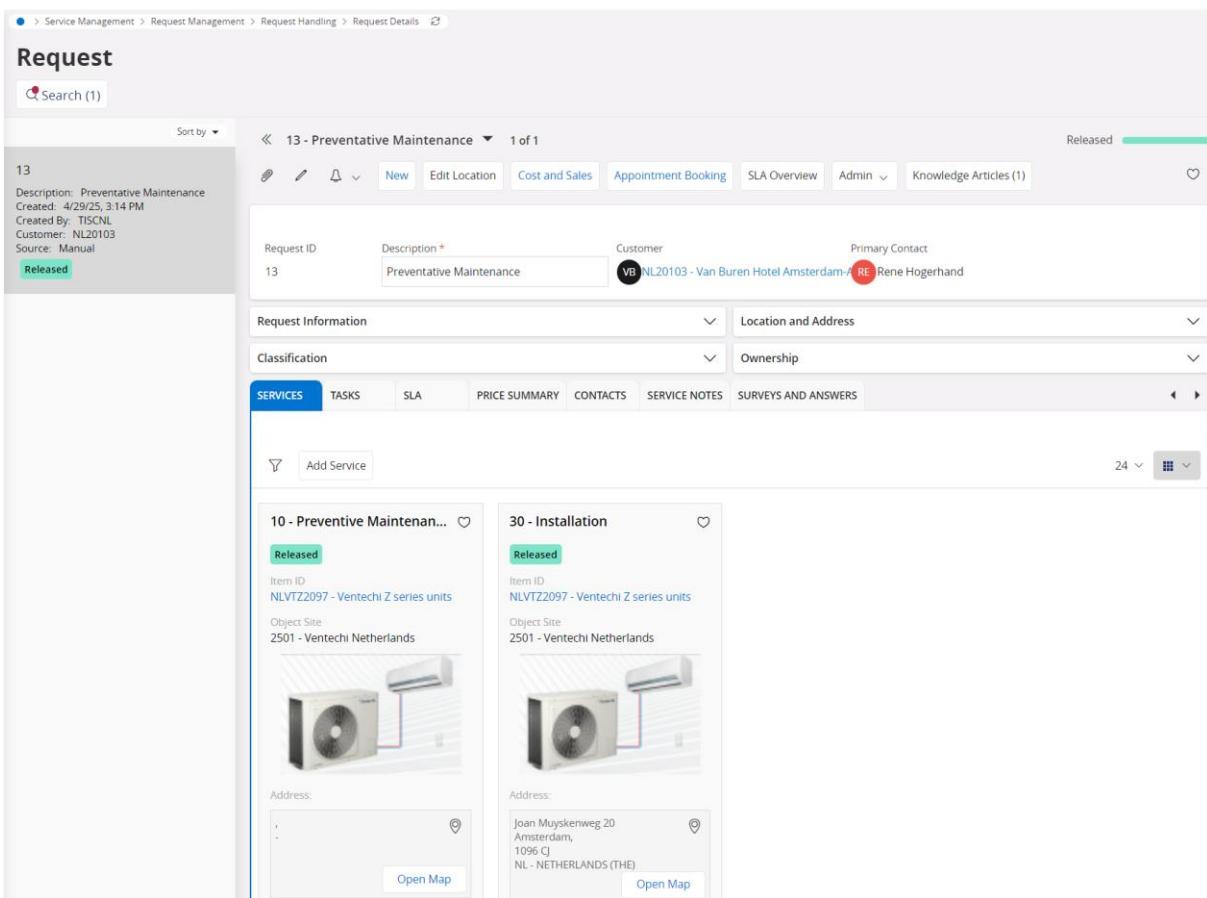
Attribute	Explanation
Request type	Used to categorize the request, useful for filtering and reporting.
Request severity	Used to define the customer's perception of the request severity, does not impact any logic.
Request priority	Work Tasks associated to the Request will automatically inherit this priority value when created. Changes are optionally applied to the associated request tasks.
Request importance	Used to define the customer's perception of the request importance, does not impact any logic.
Request category	Used to categorize the request, does not impact any logic.
Request class	Used to classify the request, does not impact any logic.
Request group	Used to group requests, does not impact any logic.

Attribute	Explanation
Request visibility	Used to classify the request, does not impact any logic.

Request Services/Scope (25R1)

Note: In 25R1, the term "Scope" was replaced with "Service" on some pages. The concept of Request Scopes however remains in place.

Request Service defines the scope(s) included in a Request. In most cases a request will only have a single service, but the concept provides additional flexibility, for example when the customer requests additional work to be carried out.



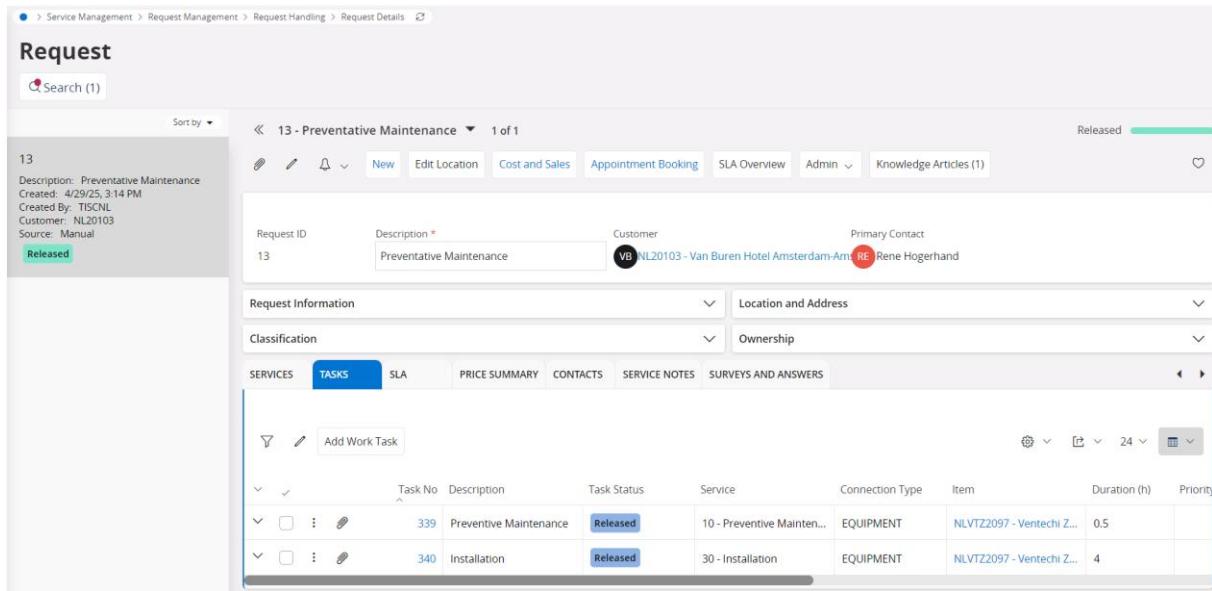
The screenshot shows the IFS Cloud Request Management interface. At the top, there's a navigation bar: Service Management > Request Management > Request Handling > Request Details. The main title is 'Request' with a subtitle '13 - Preventative Maintenance'. Below the title, there's a search bar and a toolbar with various icons. The main content area is divided into sections: 'Request Information' (Request ID: 13, Description: Preventative Maintenance, Customer: NL20103 - Van Buren Hotel Amsterdam, Primary Contact: Rene Hogerhand), 'Classification' (Ownership), and a tabbed section for 'SERVICES'. Under 'SERVICES', two items are listed: '10 - Preventive Maintenance' and '30 - Installation', both of which are marked as 'Released'. Each service item has details like Item ID, Object Site, and Address.

Request Services/Scopes contain:

- Service to be carried out (selected from the service catalog)
- Service Object on which the service is executed
- Contract
- Pricing
- SLA
- Urgency: Controls the SLA and pricing for a request, in cases where a customer wants to deviate from the standard agreement. Urgency is inherited from the Request, however changes to the request urgency will not be populated down to the scope(s).

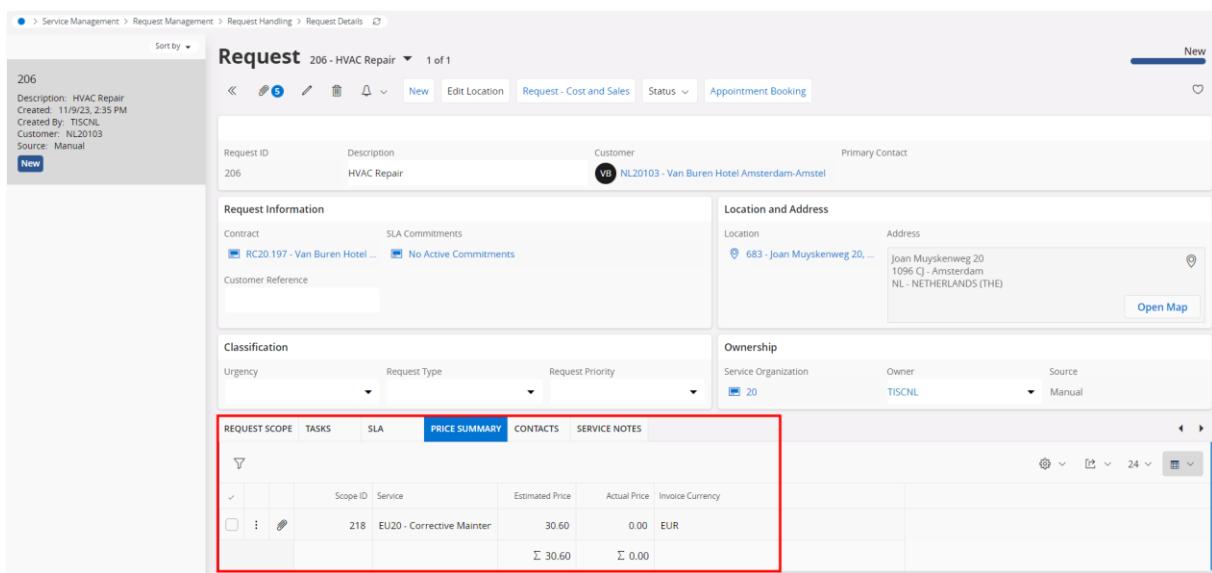
Note: When adding a service to an existing request, the system will only show services offered by the service organization that was specified on the request.

If the user is rather task-focused than service-focused or if there is only a single service, the 1..n Tasks are displayed directly under the Request.



Task No.	Description	Task Status	Service	Connection Type	Item	Duration (h)	Priority
339	Preventive Maintenance	Released	10 - Preventive Mainten...	EQUIPMENT	NLVTZ2097 - Ventechi Z...	0.5	
340	Installation	Released	30 - Installation	EQUIPMENT	NLVTZ2097 - Ventechi Z...	4	

Once the Request has been created, use the *Price Summary* tab to get a price estimate of the service offered:



Scope ID	Service	Estimated Price	Actual Price	Invoice Currency
218	EU20 - Corrective Mainter	30.60	0.00	EUR
		Σ 30.60	Σ 0.00	

For more details, please refer to [Request Contracts](#).

A user can navigate from the Request...

Service Management > Request Management > Request Handling > Request Details

Request

Search (1)

Sort by ▾ 316 - Repair Request 1 of 1 Released

Request ID: 316 Description: Repair Request Created: 7/17/25, 4:16 PM Created By: TISCNL Customer: NL20103 Source: Manual Released

Request ID	Description	Customer	Primary Contact
316	Repair Request	VB NL20103 - Van Buren Hotel Amsterdam-A...	

Request Information ▾ Location and Address ▾

Classification ▾ Ownership ▾

SERVICES TASKS SLA PRICE SUMMARY CONTACTS SERVICE NOTES SURVEYS AND ANSWERS

Details Edit Add Service Status Manage Warranties Project Connection Pre Posting

Add to Open Invoice Preview Scope Status Connection Type Reported Item Customer Warranty

(1) Service Invoicing Process No Released EQUIPMENT NLVTZ2097 - Ventechi Z... Under Warranty

20 - Corrective Maintenance Normal

to an individual Scope.

Service Management > Request Management > Request Handling > Request Scope

Request Scope

Search (1)

Sort by ▾ 316 - 319 - Corrective Maintenance 1 of 1 Released

Request ID: 316 Description: Repair Request Customer: VB Van Buren Hotel Amsterdam-Amstel Service: 319 - Corrective Maintenance Created Date: 7/17/25, 4:16 PM Released

View Request

Scope - 319		Location and Address	
Service	Connection Type	Location	914 - Joan Muyskenweg 20, NL
Corrective Maintenance	EQUIPMENT	Address	Joan Muyskenweg 20 Amsterdam, 1096 CJ NL - NETHERLANDS (THE)
Service Object	Problem/Symptom		Open Map
NLVTZ2097 - Ventechi Z series units			
Service Organization	Service Delivery Unit		
2501 - VENTECHI NETHERLANDS			
Estimated Price	Actual Price		
0 EUR	0 EUR	Under Contract	Under Warranty

If there is more than one scope under that Request, use **View Request** to navigate back to the Request.

Add Service creates another Scope on the same Request.

Add Service

Service and Contract Information

Service Type	Service *
20 - Corrective Maintenance	20 - Corrective Maintenance
Problem/Symptom	Service Organization
	2501 - Ventechi Netherlands
Contract	Service Delivery Unit

Location and Address

Region	Location	New Location
	913 - Joan Muyskenweg 20, NL	<input type="checkbox"/>
Address		
Joan Muyskenweg 20 Amsterdam, 1096 CJ NL - NETHERLANDS (THE)		
Open Map		<input type="button" value="Edit"/>

Reported Item

Model	Object	
VITZSR - Ventechi-Z Series	NLVITZ2097	
<input type="checkbox"/> Show all Objects	<input type="checkbox"/> Under Warranty	<input type="checkbox"/> View Warranty

SLA and Price Rule

SLA Template	SLA Source
20 - Silver	Warranty
Price Rule	Price Rule Sour...
0 - Free of Charge	Warranty

Setting

<input type="checkbox"/> Release After Finish
<input type="checkbox"/>

Request Tasks

● Service Management > Request Management > Request Handling > Request Details

Request 206 - HVAC Repair 1 of 1

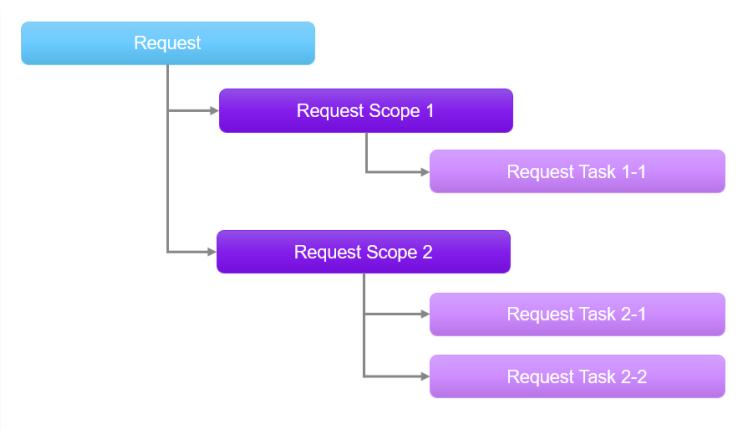
Description: HVAC Repair	Created: 11/9/23, 2:35 PM	Created By: TISCLN	Customer: NL20103	Source: Manual																				
New																								
Request ID	Description	Customer	Primary Contact																					
206	HVAC Repair		NL20103 - Van Buren Hotel Amsterdam-Amstel																					
Request Information																								
Contract	SLA Commitments	Location and Address																						
	RC20197 - Van Buren Hotel Amsterdam-Amst...	<input type="checkbox"/> No Active Commitments	Location	Address																				
Customer Reference		683 - Joan Muyskenweg 20, NL Joan Muyskenweg 20 1096 CJ - Amsterdam NL - NETHERLANDS (THE) Open Map																						
Classification	Request Type	Request Priority	Ownership																					
Urgency			Service Organization	Owner																				
			20	TISCLN																				
REQUEST SCOPE	TASKS	PRICE SUMMARY	CONTACTS	SERVICE NOTES																				
Work Tasks																								
<table border="1"> <thead> <tr><th>Task No.</th><th>Description</th><th>Status</th><th>Duration</th><th>Order No.</th><th>Connection Type</th><th>Item</th><th>Work Stage</th><th>Activity Type</th><th>Dep.</th></tr> </thead> <tbody> <tr><td>202</td><td>Corrective Maintenance</td><td>New</td><td>2</td><td>10</td><td>EQUIPMENT</td><td>NLVITZ2097 - Ventechi-Z series units</td><td></td><td></td><td></td></tr> </tbody> </table>					Task No.	Description	Status	Duration	Order No.	Connection Type	Item	Work Stage	Activity Type	Dep.	202	Corrective Maintenance	New	2	10	EQUIPMENT	NLVITZ2097 - Ventechi-Z series units			
Task No.	Description	Status	Duration	Order No.	Connection Type	Item	Work Stage	Activity Type	Dep.															
202	Corrective Maintenance	New	2	10	EQUIPMENT	NLVITZ2097 - Ventechi-Z series units																		

Request tasks define the execution of the request scopes. Initially the Tasks inherit their details from the standard tasks defined in the service catalog. This includes:

- Work description, type, duration
- Work steps (to be conducted by the assigned resource)
- Resource demands (e.g., one technician) including required skills (i.e., NGSM skills, but also competencies and certificates from IFS Cloud HCM including the minimum required level)
- Required material
- Service Level Agreement (SLA)
- Dependencies (when using multiple tasks)

The task can inherit further details:

- A Service Object or Model can be specified during scope creation or later at the work task. Both service object and model can introduce additional skill requirements.
- Location (either customer or Service Object location)
- Priority can be specified on the Request
- The scope's SLA (defined by the urgency) can overwrite the default SLA defined in the service catalog
- **Allow Multiple Visits** is inherited from the Scheduling Activity Type (maintained at *Service Scheduling>Basic Data>Scheduling Basic Data>Scheduling Activity Type*) that is associated to the task's Activity Type.

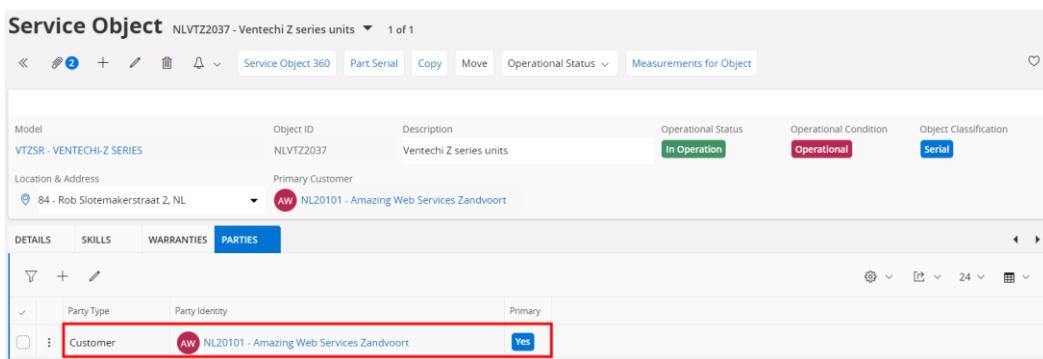


Request Process

Request Initiation (25R1)

Requests can be initiated in a number of ways, including:

- A contact center taking a call from a customer
- Recurring services i.e., preventative maintenance
- From the *Service Object 360* page if the object has a primary customer connected as party

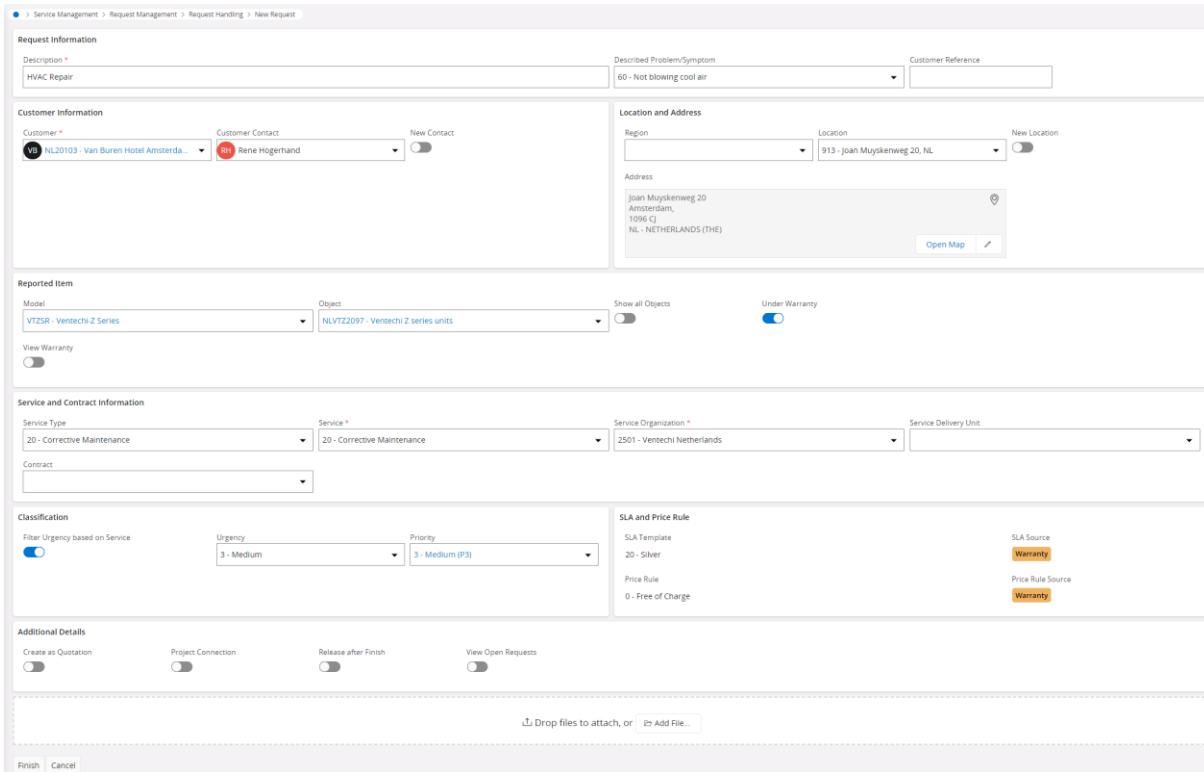


The screenshot shows the 'Service Object' page for object ID NLVTZ2037. The top navigation bar includes links for 'Service Object 360', 'Part Serial', 'Copy', 'Move', 'Operational Status', and 'Measurements for Object'. The main details section displays the Model (VTZSR - VENTECHI-Z SERIES), Object ID (NLVTZ2037), Description (Ventechi Z series units), Operational Status (In Operation), Operational Condition (Operational), and Object Classification (Serial). Under the 'PARTIES' tab, a table lists a single customer entry: 'Customer' (Party Type), 'NL20101 - Amazing Web Services Zandvoort' (Party Identity), and 'Yes' (Primary). The entire 'Customer' row is highlighted with a red border.

- Technicians on customer site
- Customer self-service portal
- Interfaces from other internal or external systems

When using the **New Request Assistant** page, the system supports different usage patterns starting from the customer, the location, the model, or the service object. Starting with either of them, other fields are defaulted or filtered. Refer to the page help “Initiate a Request via New Request Assistant” for more details.

Selecting customer or object will use its location as the Request and Scope location. **New Location** allows the user to create a one-off address (not registered as a location in the system) when creating the Request. A similar dialog is presented when adding a Scope to an existing Request.



The screenshot shows the 'New Request' page in the IFS Service Management application. The page is divided into several sections:

- Request Information:** Includes fields for 'Description' (HVAC Repair), 'Described Problem/Symptom' (60 - Not blowing cool air), and 'Customer Reference'.
- Customer Information:** Shows 'Customer' (NL20103 - Van Buren Hotel Amsterdam) and 'Customer Contact' (Rene Hogerhand). There is also a 'New Contact' toggle.
- Location and Address:** Includes 'Region' (Region), 'Location' (913 - Joan Muyskenweg 20, NL), and a 'New Location' toggle. An address field shows 'Joan Muyskenweg 20, Amsterdam, 1096 CJ, NL - NETHERLANDS (THE)' with a map link.
- Reported Item:** Shows 'Model' (VTZSR - Ventechi Z Series) and 'Object' (NLVTZ2097 - Ventechi Z series units). There are 'Show all Objects' and 'Under Warranty' toggles.
- Service and Contract Information:** Includes 'Service Type' (20 - Corrective Maintenance), 'Service' (20 - Corrective Maintenance), 'Service Organization' (2501 - Ventechi Netherlands), and 'Service Delivery Unit'.
- Classification:** Shows 'Filter Urgency based on Service' (toggle), 'Urgency' (3 - Medium), 'Priority' (3 - Medium (P3)), 'SLA and Price Rule' (SLA Template: 20 - Silver, Price Rule: 0 - Free of Charge), and 'SLA Source' (Warranty).
- Additional Details:** Includes 'Create as Quotation' (toggle), 'Project Connection' (toggle), 'Release after Finish' (toggle), 'View Open Requests' (toggle), and a file attachment section ('Drop files to attach, or Add File...').

When a **Service Type** is selected, only Services with that type will be displayed. Location includes the customer/object locations plus any location with Type=Location. **Region** can be used to further filter the list of locations; however it's just a filter i.e., picking a region will not associate the Request with that region.

For an existing Request, **Edit Location** allows changing the location on the **Request** and the **Scope** with the possibility to propagate the change to the lower levels. **Edit Location** on the Task allows a user to change the location and also to provide a separate end location (e.g., for inspections of power lines).

X

Edit Location and Address

Task Location

New Location

Task Address

Open Map

No 45
Colombo 9
LK - SRI LANKA

Task End Location

BROWNS HOSPITAL - CMB 2 - BROWNS ...

OK
Cancel

Upon **Finish**, the system checks if the customer is credit blocked.

● Application Base Setup > Enterprise > Customer > Customer > Credit Information

Credit Information

Q Search (1)

Sort by
« NL20103 - Van Buren Hotel Amsterdam-Amstel ▾
1 of 1

vb
NL20103

Name:
Van Buren Hotel Amsterdam-Amstel
Category: Customer

Address
Contact
Communication Method
Message Setup
Invoice
Payment

Credit Information
CRM Info
Sales
Project Reporting Info
Show less

Customer: NL20103 Name: Van Buren Hotel Amsterdam-Amstel Association No:

Company: 25 - Ventechi Netherlands

Customer Credit Notes
... ▾

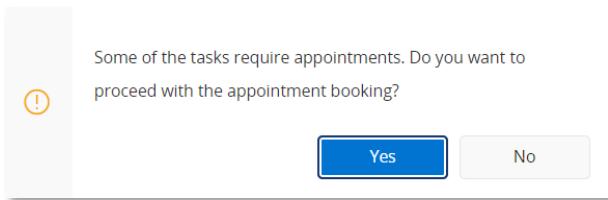
External Credit Agency		Corporate Credit Relationship		
Credit Agency No	Credit Agency Rating	Credit Relation Exist	Relation Type	Parent Company
		No		Parent Customer ID
Credit Control Details				
Credit Limit		Company Credit Limit		
Yes		10/31/2024		
Allowed Overdue Amount		Allowed Overdue Days		

If set to **Yes**, the user will get a warning message and needs to confirm that the Request should be created anyway.

Service Management > Request Management > Request Handling > New Request

Customer Information	Location and Address		
Customer * VB NL20103 - Van Buren Hotel Amsterdam-A...	Location 904 - Joan Muyskenweg 20, NL		
New Contact <input type="checkbox"/>	New Location <input type="checkbox"/>		
The customer is credit blocked, do you still want to create the Request? <input type="button" value="Yes"/> <input type="button" value="No"/>			
Reported Item	Object		
Model VTZSR - Ventechi-Z Series	Object NLVLTZ2097 - Ventechi Z series units		
Service and Contract Information			
Service * 20 - Corrective Maintenance	Service Organization * 209 - Ventechi Netherlands	Service Delivery Unit	Contract Line
Warranty <input type="checkbox"/>	Filter Urgency based on Service <input type="checkbox"/>	Urgency	

If **Appointment Required** is True on one of the created tasks, the user will be prompted to book the appointments immediately.



When selecting **No**, a reason must be specified.

Enter Reason

Enter a reason for not booking an appointment.

Reason Group		
Reason Code * 40	Description Customer Specific Request	Note
<input type="button" value="OK"/> <input type="button" value="Cancel"/>		

Output from the Initiation step is a Request, 1..n Scope(s), and 1..n Request Task(s) that are ready for execution. The goal is that the work tasks are as complete as possible for dispatch and execution so that minimal or no manual intervention is needed. Similarly, there should be predefined material sourcing for parts.

Release makes the request available for scheduling in the Dispatch Console and PSO (for PSO it's possible to change the status that should trigger sending the task, this is done on the Scheduling Dataset). The toggle **Release after Finish** on the *New Request Assistant* page can be used to automatically release the newly created Request. This option will default to the previous selection i.e., the next time the user opens the assistant, it will default to what was selected the previous time.

Request – Cost and Sales provides an overview of planned and actual cost, revenue, and profit margin in the selected invoice currency.

Sort by ▾

Request - Cost and Sales 206 - HVAC Repair ▾ 1 of 1

New

Request ID	Description	Customer
206	HVAC Repair	VBNL20103 - Van Buren Hotel Amsterdam-Amstel

General Information

Base Currency	Invoice Currency	Sales Site	Invoice Preview/s	Invoice/s
EUR	EUR	20 - Ventechi Netherlands	No	No

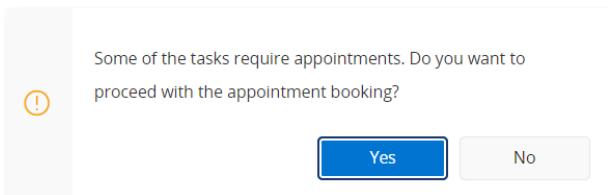
Customer Reference

Request Scope

Request Scope	Service	Status	Planned Total Cost	Planned Total Revenue	Planned Profit Margin	Planned Profit Margin Rate	Actual Total Cost	Actual Total Revenue	Actual Profit Margin	Actual Profit Margin Rate	Base Currency
218	EU20 - Corrective Mainten	New	243.50	30.60	-212.90	-695.87	0.00	0.00	0.00	0.00	EUR
			Σ 243.50	Σ 30.60	Σ -212.90	Σ -695.87	Σ 0.00	Σ 0.00	Σ 0.00	Σ 0.00	

Appointment Booking (25R1)

If the customer's business process requires appointment booking before a technician can be sent onsite (as we often find in B2C scenarios), this process can be launched directly at the end of the *New Request Assistant*...



...or directly after Request creation...

Success!

Request 1331 - Repair created.

Create Another Request Request Details Appointment Booking

...or from the *Request* page:

Sort by ▾

Request 1331 - Repair ▾ 1 of 1

New

Request ID	Description	Customer
1331	Repair	AWNL20101 - Amazing Web Services Z...

General Information

Service Organization	Location & Address	SLA
10	84	8 days, 0 hrs, 57 mins to respond
Customer Reference	Owner	TISCNL

Urgency

Urgency

Appointment Booking

The button will only show up when there is at least one task with resource demand, duration, and location.

For details refer to [Scheduling Demystified](#).

Request Enrichment

This is an optional step that is only needed when the initial set of tasks and their details are not sufficient for direct scheduling. A reason could be that the customer expressed more details that require additional spare parts, more/different resources and/or skills, time constraints, etc.

These details are specified on the *Request Work Task* and *Request Work Task – Scheduling and Allocation* pages.

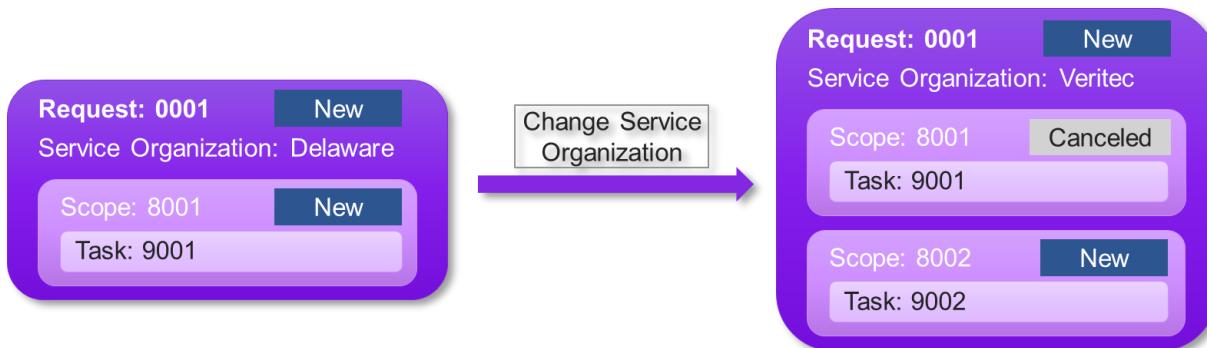
Assignment of Service Contractors (25R1★)

Request Scopes/Service can be assigned to Service Contractors for execution. For details, [Service Contractor Management](#) (25R1P).

Change of Service Organization (25R1★)

Note: It is possible to change the Service Delivery Unit on a Request while the Request is in status New.

It is possible to change Request ownership if a Service Organization was wrongly chosen or work needs to be relocated. Under the same Request, Scopes and Tasks will be canceled and replaced by new ones, carrying over the previous details. However, any manually added tasks from the beginning (i.e., tasks not created from standard tasks) will not be regenerated as part of the new Scopes.



Use **Admin>Edit Service Organization** to initiate the change. This can be done when the Request is in status New or Released from Request Details as well as from Request Scope page.

Service Management > Request Management > Request Handling > Request Details

Request

Search (1)

Sort by << 295 - Repair Request 1 of 1 Released

295
Description: Repair Request
Created: 5/26/25, 4:18 PM
Created By: TISCNL
Customer: NL20103
Source: Manual
Released

Request ID	Description *	Customer	Primary Contact
295	Repair Request	NL20103 - Van Buren Hotel Amsterdam	RE Rene Hogerhand

Edit Service Organization (highlighted with a yellow arrow)

Edit Service Organization

Request Information

SLA Commitments
Active Commitments on this Request

Customer Reference Customer Order Type

Customer Order No

Classification

Urgency Request Type

Request Priority

Location and Address

Location
914 - Joan Muykenweg 20, NL

Address
Joan Muykenweg 20
Amsterdam,
1096 CJ
NL - NETHERLANDS (THE)
[Open Map](#)

Ownership

Service Organization
2501 (highlighted with a red box)

Service Delivery Unit

Owner TISCNL Source Manual

The new Service Organization must provide **all** services from the Request Scopes and belong to the **same company** as the current Service Organization. Additionally, Service Organizations from connected contracts are accessible.

X Edit Service Organization

Changing the SO will create new Scopes and Tasks structure and cancel the current Scopes and Tasks

Service Organization *	Service Delivery Unit
2502 - Ventechi Am...	

Finish **Cancel**

The Request's Service Organization has been updated. Consequently, the original scope has been cancelled and replaced with a new scope referencing the new Service Organization. Furthermore, previous tasks have been cancelled, and new tasks have been created to align with the updated Service Organization.

Service Management > Request Management > Request Handling > Request Details

Request

Search (1)

Sort by: 295 - Repair Request 1 of 1

Released

Description: Repair Request
Created: 5/26/25, 4:18 PM
Created By: TISCNL
Customer: NL20103
Source: Manual

Request ID: 295	Description: Repair Request	Customer: VB NL20103 - Van Buren Hotel Amsterdam-Am... Primary Contact: RE Rene Hogerhand																																			
Request Information		Location and Address																																			
Classification	Urgency	Request Type	Request Priority	Ownership	Service Organization: 2502	Service Delivery Unit	Owner: TISCNL																														
				Source	Manual																																
SERVICES TASKS SLA PRICE SUMMARY CONTACTS SERVICE NOTES SURVEYS AND ANSWERS																																					
<table border="1"> <thead> <tr> <th colspan="2">Add Service</th> <th>Add to Open Invoice</th> <th>Prev...</th> <th>Service Organization</th> <th>Scope Status</th> <th>Connection Type</th> <th>Reported Item</th> <th>Customer Warranty</th> <th>Sup War...</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/></td> <td>20 - Corrective Maintenance</td> <td>Normal</td> <td>No</td> <td>2501</td> <td>Cancelled</td> <td>EQUIPMENT</td> <td>NLVIZ2097 - Ventechi Z...</td> <td>Under Warranty</td> <td>No</td> </tr> <tr> <td><input type="checkbox"/></td> <td>20 - Corrective Maintenance</td> <td>Normal</td> <td>No</td> <td>2502</td> <td>New</td> <td>EQUIPMENT</td> <td>NLVIZ2097 - Ventechi Z...</td> <td>Under Warranty</td> <td>No</td> </tr> </tbody> </table>								Add Service		Add to Open Invoice	Prev...	Service Organization	Scope Status	Connection Type	Reported Item	Customer Warranty	Sup War...	<input type="checkbox"/>	20 - Corrective Maintenance	Normal	No	2501	Cancelled	EQUIPMENT	NLVIZ2097 - Ventechi Z...	Under Warranty	No	<input type="checkbox"/>	20 - Corrective Maintenance	Normal	No	2502	New	EQUIPMENT	NLVIZ2097 - Ventechi Z...	Under Warranty	No
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<input type="checkbox"/>	20 - Corrective Maintenance	Normal	No	2502	New	EQUIPMENT	NLVIZ2097 - Ventechi Z...	Under Warranty	No																												

Note: Edit Service Organization allows changing the Request's associated Service Organization (SO) and its Service Delivery Unit (SDU). It is, however, not possible to use the Assistant to only change the SDU of the current SO. It is possible to directly change the Service Delivery Unit on a Request while the Request is in status New.

Request Quotes

In cases where the customer needs a quotation before ordering a service, an optional Request Quote can be generated using one of the following options:

- Create quotation when creating the request. At the bottom of the *New Request* page, activate **Quotation Needed** and provide the necessary details.
- Create quotation for an existing request using the **New Quotation** button (for one or multiple scopes). All services from the selected scopes will be added to quotation. If another scope is added afterwards, it can be added to the quotation using the **Add Scope** button under Request Quotation Scopes. It is also possible to add a scope directly to the quotation using the **New Scope** button, which will also add the scope to the Request. Contract status must be Planned.
- Using the *New Request Quotation* page, which is essentially the same as the *New Request* approach.

Request Quotes are associated to a Request and can refer to one or multiple scopes. It is not possible to have separate quotations for scopes of the same request. If there is no quotation associated to the request, the **New Quotation** button is available on the scope(s). As soon as a quotation was created, this button disappears and instead a link to the quotation is displayed on the Request header. Quotations can only be created for Requests with status **New**.

Request 1325 - Repair ▾ 1 of 1

New

« « » » Add Contact Note View Status Appointment Booking

Request ID 1325	Description Repair	Customer RH SEB2B16 - Ready Hotel Continental
General Information		
Service Organization 10	Location & Address 639	Contract RC10.150 - Ready Hotel Continental
SLA Overdue 6 days, 7 hrs, 43 mins	Quotation 1 - RQ1325	Customer Reference
Owner ALHOSE		

On the Request Quotation header, it is possible to **Change Invoice Currency**, on the scope lines a user can change **Price Details** (i.e., select a different price rule).

The **Print Quotation Draft** button is available while the quote status is New. Once the status changes to Sent for Approval, the **Print Quotation** button can be used to print/preview the quote. While waiting for approval, the quoted scopes are frozen, and a message is displayed to the user:

Request 1330 - Installation ▾ 1 of 1

New

« « » » Add Contact Note View Status Appointment Booking

Scope - 1338, 1341, 1342, 1344 connected to Quotation RQ1330 has been sent for approval

Request ID 1330	Description Installation	Customer AW NL20101 - Amazing Web Services Zandvoort																																																																			
General Information																																																																					
Urgency	▼																																																																				
Request Classification	▼																																																																				
REQUEST SCOPE PRICE SUMMARY CONTACTS <table border="1"> <thead> <tr> <th>Service</th> <th>Quotation Status</th> <th>Price Rule</th> <th>Status</th> <th>Connection Type</th> <th>Item</th> <th>Associated Model</th> <th>Contract</th> <th>Contract Line</th> <th>Replaced By Scope</th> <th>Urgency</th> <th>Sales Site</th> </tr> </thead> <tbody> <tr> <td>EU0 - Provisioning</td> <td>Sent For Approval</td> <td>10 - Premium Pricing</td> <td>New</td> <td>EQUIPMENT</td> <td>NLVIZ2037 - Ventechi Z...</td> <td>VT2SR - Ventechi Z Series</td> <td></td> <td></td> <td></td> <td>10 - V4</td> </tr> <tr> <td>EU30 - Installation</td> <td>Sent For Approval</td> <td>10 - Premium Pricing</td> <td>New</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>10 - V4</td> </tr> <tr> <td>EU20 - Corrective Maint...</td> <td>Sent For Approval</td> <td>10 - Premium Pricing</td> <td>New</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>10 - V4</td> </tr> <tr> <td>EU50 - Implementation ...</td> <td>Sent For Approval</td> <td>10 - Premium Pricing</td> <td>New</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>10 - V4</td> </tr> <tr> <td>EU60 - Remote Diagnos...</td> <td>Sent For Approval</td> <td>10 - Premium Pricing</td> <td>New</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>10 - V4</td> </tr> </tbody> </table>			Service	Quotation Status	Price Rule	Status	Connection Type	Item	Associated Model	Contract	Contract Line	Replaced By Scope	Urgency	Sales Site	EU0 - Provisioning	Sent For Approval	10 - Premium Pricing	New	EQUIPMENT	NLVIZ2037 - Ventechi Z...	VT2SR - Ventechi Z Series				10 - V4	EU30 - Installation	Sent For Approval	10 - Premium Pricing	New							10 - V4	EU20 - Corrective Maint...	Sent For Approval	10 - Premium Pricing	New							10 - V4	EU50 - Implementation ...	Sent For Approval	10 - Premium Pricing	New							10 - V4	EU60 - Remote Diagnos...	Sent For Approval	10 - Premium Pricing	New							10 - V4
Service	Quotation Status	Price Rule	Status	Connection Type	Item	Associated Model	Contract	Contract Line	Replaced By Scope	Urgency	Sales Site																																																										
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EU60 - Remote Diagnos...	Sent For Approval	10 - Premium Pricing	New							10 - V4																																																											

When the quote is accepted, the Request Quote and its Scopes are set to **Accepted**, the Request and all of its scopes are **Released**.

When the quote is rejected, the Request Quote and its Scopes are set to **Rejected**, and all referenced Request Scopes are **Cancelled**.

Note: If the Request Quote is cancelled, the associated Request is cancelled as well, even if it has additional scopes. If the Quote is rejected, it is not possible to modify it or create a new Quote for the same Request.

Request Dispatch

The main goal of the Dispatch step is to optimize the usage of the resources and make sure that SLA commitments can be met. There are two options for scheduling: The Dispatch Console allows

a dispatcher to schedule tasks one by one, either manually or assisted (by filtering resources based on skills and location). The second option is using IFS Cloud's Advanced Scheduling and Optimization (PSO) component to auto-schedule all relevant tasks.

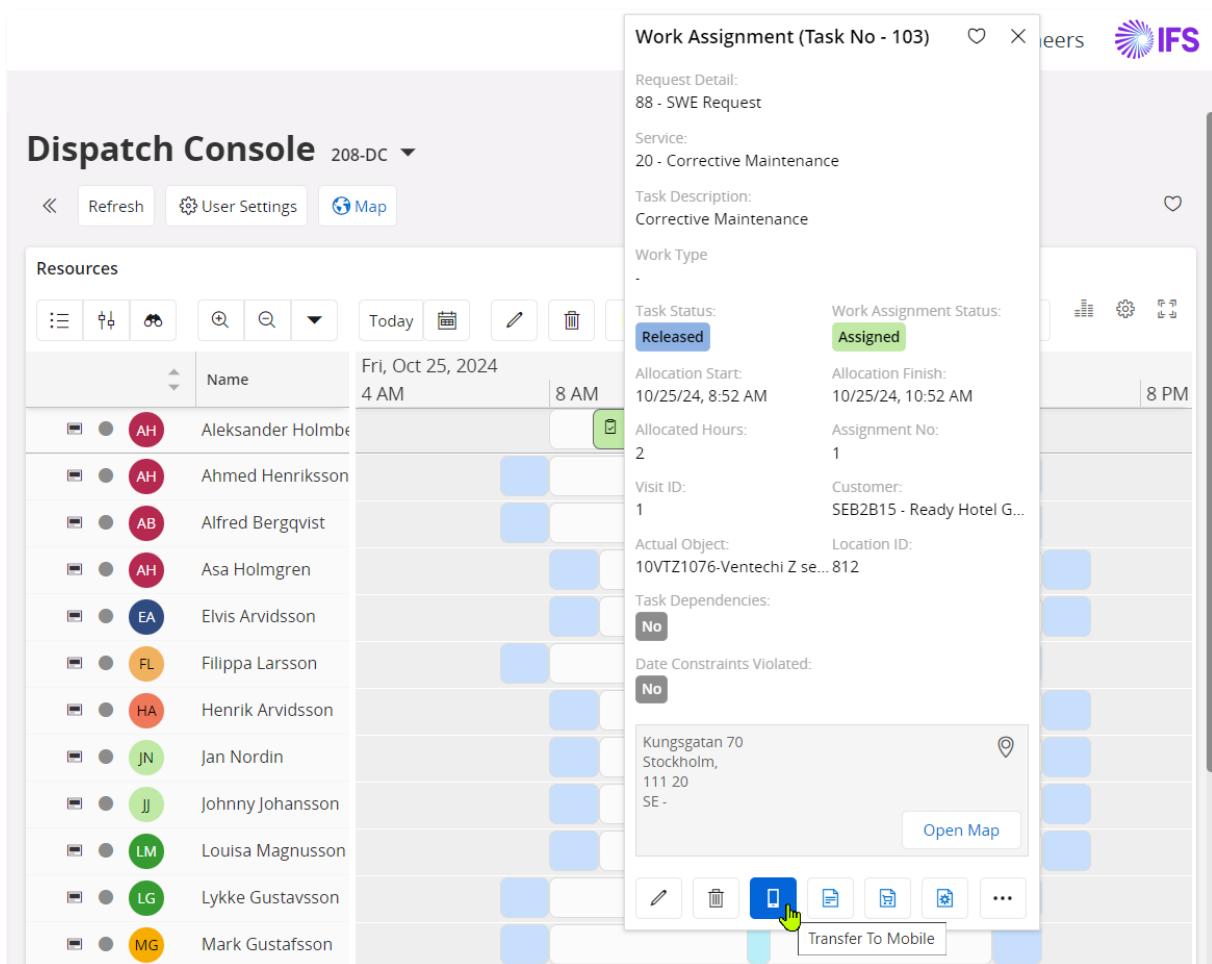
In both cases the task status needs to be **Released**, which is achieved by releasing the Request and Scope.

For more information about Dispatch Console and PSO please refer to [Scheduling Demystified](#).

Transfer Task to Mobile (MWO)

When the Request Task has been allocated to a resource (Dispatch Console or Commit in PSO), **Transfer to Mobile** needs to be executed. This will send a push notification to the technician and make the task available in IFS Mobile/MWO.

Transfer to Mobile is available on the individual allocation in the Dispatch Console...



The screenshot shows the Dispatch Console interface. On the left, a grid of resources is listed with their names and availability. One resource, Aleksander Holmberg (AH), is selected and has a green 'Released' status indicator next to its name. On the right, a detailed view of the work assignment for Task No - 103 is shown. The task details include:

- Request Detail: 88 - SWE Request
- Service: 20 - Corrective Maintenance
- Task Description: Corrective Maintenance
- Work Type
- Task Status: Released
- Work Assignment Status: Assigned
- Allocation Start: 10/25/24, 8:52 AM
- Allocation Finish: 10/25/24, 10:52 AM
- Allocated Hours: 2
- Assignment No: 1
- Visit ID: 1
- Customer: SEB2B15 - Ready Hotel G...
- Actual Object: 10VTZ1076-Ventechi Z se... 812
- Location ID: Kungsgatan 70 Stockholm, 111 20 SE -
- Task Dependencies: No
- Date Constraints Violated: No

A modal window for the selected resource (Aleksander Holmberg) is open, showing the address: Kungsgatan 70 Stockholm, 111 20 SE -. It includes a 'Transfer To Mobile' button at the bottom, which is highlighted with a yellow arrow.

...and on various *Task Detail* pages.

Sort by ▾

Request Work Task

103 - Corrective Maintenance 1 of 1

Released

Description: Corrective Maintenance
Actual Item Description:
Ventech Z series units

Released

Transfer To Mobile

Task Details	Location and Address
Task No 103	Location 812 - Kungsgatan 70, SE

If an Assignment exists, the Task Assignment will be transferred to the MWO user directly. If it doesn't, the user can select a resource or alternatively decide to send the task as a **Pool Task** i.e., it lands in a pool from where MWO users can manually pick it. For details, please refer to [MWO Demystified](#).

Transfer to Mobile can also be automated using the **Transfer Work Assignments to Mobile Database Task**.

Sort by ▾

Database Task Schedules

New

View Schedule

(1)	Schedule Id	Name	Database Task	Active	Next Execution	Start Date	Executions	Execution Plan
<input checked="" type="checkbox"/>	163	Transfer Work Assignments to Mobile	Transfer Work Assignments to Mobile	No	10/19/24, 2:47 AM EDT	10/19/2024	0	EVERY 00:01

Click **View Schedule** to access job details, set the scheduling cycle, and define parameters to filter assignments (e.g., specific Service Organization) and determine how far ahead the automation should operate.

General

Name	Database Task	Active
Transfer Work Assignments to Mobile	Transfer Work Assignments to Mobile	No
Scheduled By	Next Execution	Number of Times Executed
IA IFSADMIN	10/19/24, 2:47 AM EDT	0

Schedule

Time Interval Options

Parameters

Name	Value	Required
TASK_SITE_	No	
MAINT_ORG_	No	
ALLOCATED_TO_	No	
TRANSFER_WINDOW_	7	No
SERVICE_ORG_	No	
DELIVERY_UNIT_	No	

Streams

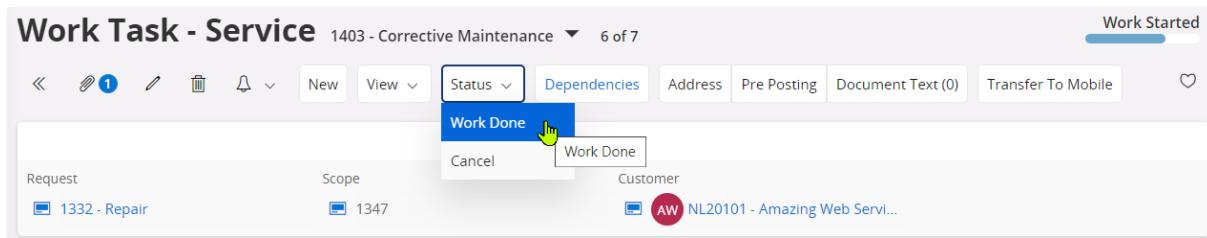
Send Stream Notification No

The system determines the transfer window end as sys_date + TRANSFER_WINDOW_. Then all work assignments with allocated start < transfer window end will be considered.

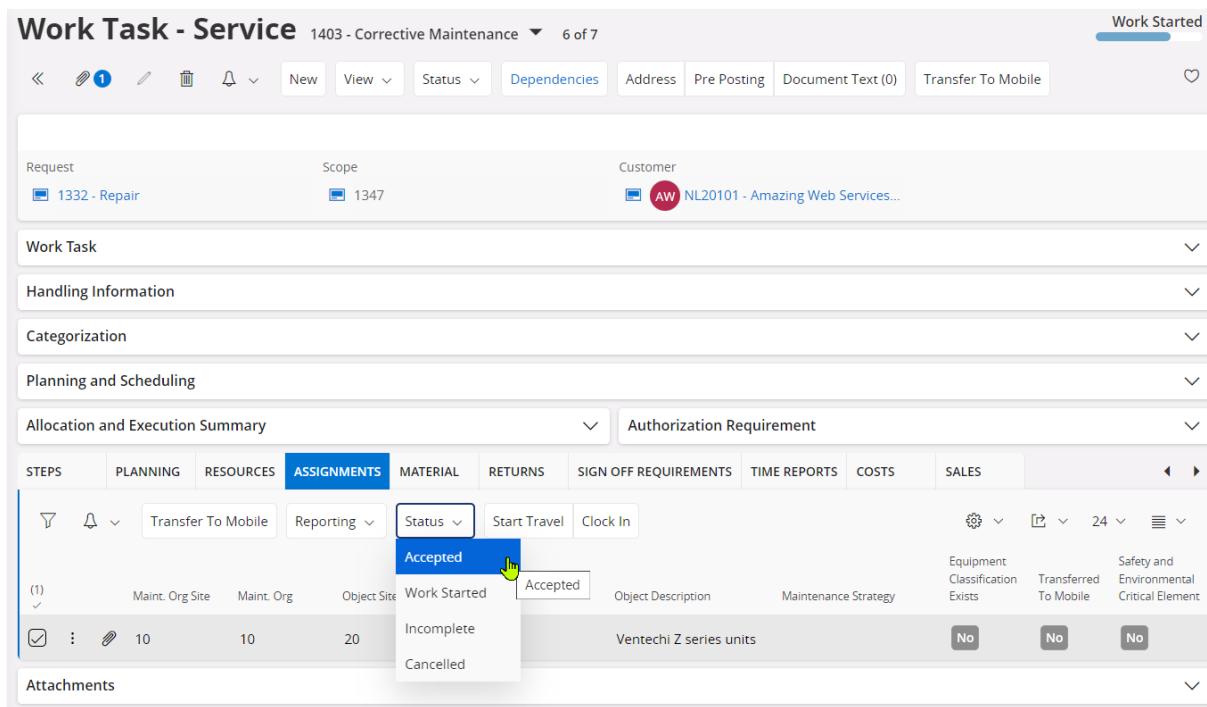
Request Execution

Mobile work execution using IFS Mobile/MWO is covered in [MWO Demystified](#), however there is also the possibility to process the request from the back office using the web client.

Option 1: Update the task status Released → Work Start → Work Done → Finish. Work Done is only possible when no resource has been assigned.



Option 2: Update the assignment status. This is similar to doing task status updates in the mobile app.



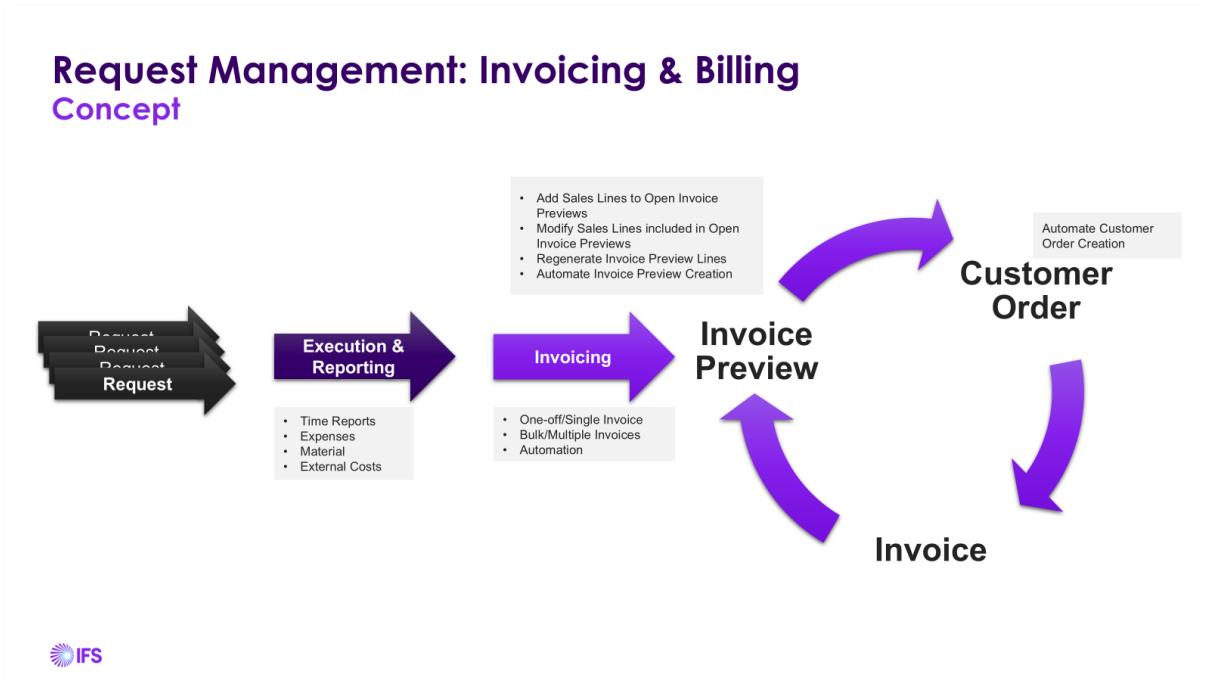
When selecting **Start Travel**, only the assignment status is updated. If a timestamp for the travel start should be captured, use the **Clock In** button after Start Travel. When the assignment is set to **Start Work** or **Completed**, the system will capture additional timestamps. The user needs to specify the respective time types i.e., work time and travel time.

The user will be asked to clock in when setting status Work Started and clock out when setting status Completed, if the setting “Allow Clock In Automatically” is enabled on Site/Maintenance.

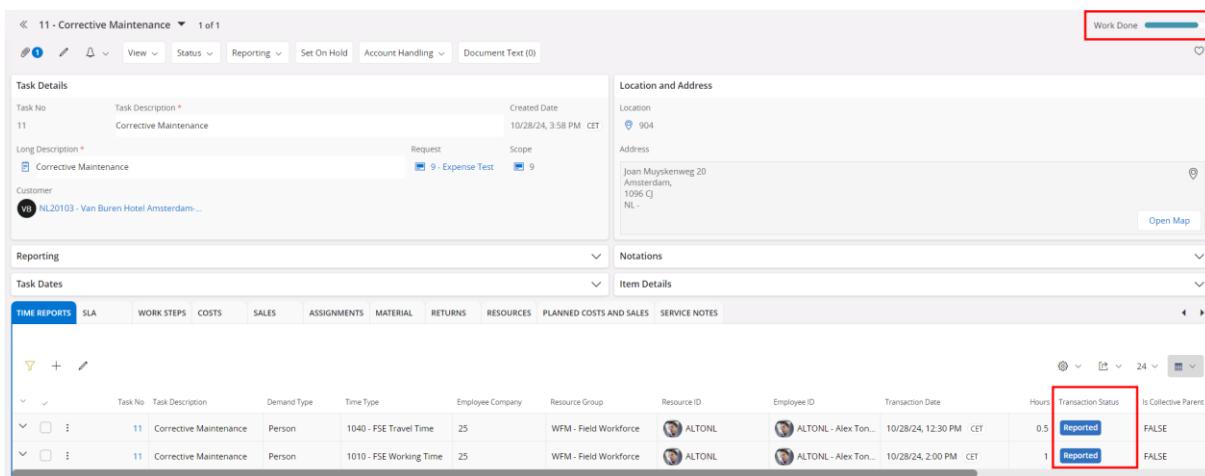
Request Invoicing/Closing (25R1)

Invoicing involves various steps and limitations, which can lead to inefficiencies and delays in sending invoices to customers. This may present a challenge for service providers who depend on timely invoicing to ensure smooth operations and maintain cash flow.

The invoicing process in Request Management includes features such as batch invoicing, automatic invoice creation, and the option to skip previews when suitable. These capabilities aim to simplify the process and offer flexibility to address different customer requirements and billing situations.



When all Assignments have been set to **Completed**, the Task status changes to **Work Done**. When not using assignments, the task status can be updated directly. The *Time Reports* tab shows reported times (typically from MWO) with a Transaction Status of **Reported**.



The screenshot shows the IFS Cloud interface for a task named "11 - Corrective Maintenance".

Task Details:

- Task No: 11
- Task Description: Corrective Maintenance
- Created Date: 10/28/24, 3:58 PM CET
- Location: 904
- Address: Joan Muyserweg 20, Amsterdam, 1096 CJ, NL

Reporting:

Time Reports:

Task No	Task Description	Demand Type	Time Type	Employee Company	Resource Group	Resource ID	Employee ID	Transaction Date	Hours	Transaction Status	Is Collective Parent
11	Corrective Maintenance	Person	1040 - FSE Travel Time	25	WFM - Field Workforce	ALTONL	ALTONL-Alex Ton...	10/28/24, 12:30 PM CET	0.5	Reported	FALSE
11	Corrective Maintenance	Person	1010 - FSE Working Time	25	WFM - Field Workforce	ALTONL	ALTONL-Alex Ton...	10/28/24, 2:00 PM CET	1	Reported	FALSE

Using **Authorize** or **Authorize All** the time reports can be authorized manually. It's also possible to use automatic authorization by navigating to **Application Base Setup>System Setup>System Definitions>Object Properties** and setting some/all of the following parameters to **Yes**.

Object Properties

Search

Object LU	Object Key	Property Name	Property Value	Validation... Enabled	Validation Method	Restricted
MaintenanceConfiguration	*	AUTO_AUTH_SIGN	TRUE	Yes	Maintenance_Configuration_API.Validate_Parameter	No
MaintenanceConfiguration	*	AUTO_AUTH_SIGN_EXP	TRUE	Yes	Maintenance_Configuration_API.Validate_Parameter	No
MaintenanceConfiguration	*	AUTO_AUTH_SIGN_EXT	TRUE	Yes	Maintenance_Configuration_API.Validate_Parameter	No
MaintenanceConfiguration	*	AUTO_AUTH_SIGN_TOOL	TRUE	Yes	Maintenance_Configuration_API.Validate_Parameter	No
MaintenanceConfiguration	*	DEF_AUTH_SIGN	TISCLN	No		No

- AUTO_AUTH_SIGN - authorization of time
- AUTO_AUTH_SIGN_EXP - authorization of manual expense
- AUTO_AUTH_SIGN_EXT - authorization of manual external
- AUTO_AUTH_SIGN_TOOL - authorization of tool time

If any of these parameters are set to Yes, the value from system parameter **DEF_AUTH_SIGN** will be used for the automatic authorization of that type of posting rows. The user needs to be defined as a user on the respective company to be able to be used for automatic authorizations.

As soon as the Task status is set to **Finish**, the respective transaction lines are authorized automatically.

<> 11 - Corrective Maintenance << 1 of 1

View Reopen Set On Hold Account Handling Document Text (0)

Task Details Location and Address

Task No: 11	Task Description: Corrective Maintenance	Created Date: 10/28/24, 3:58 PM CET	Location: 904							
Long Description: Corrective Maintenance	Request: 9 - Expense Test	Scope: 9	Address: Joan Mookkenweg 20, Amsterdam, 1199 CJ NL							
Customer: VBNL20103 - Van Buren Hotel Amsterdam...			Open Map							
Reporting	Notations									
Task Dates	Item Details									
TIME REPORTS	SLA	WORK STEPS	COSTS	SALES	ASSIGNMENTS	MATERIAL	RETURNS	RESOURCES	PLANNED COSTS AND SALES	SERVICE NOTES

Transaction Status

Hours	Transaction Status	Is Collective Parent
0.5	Authorized	FALSE
1	Authorized	FALSE

Sales and cost lines can be reviewed on the Task or the Request. On the Request use **Cost and Sales** to move to the page:

Request - Cost and Sales

Search (1)

Sort by: ...

General Information

Scope ID

ACTUAL PLANNING

Actual Fixed Price Lines

(No data)

Sales Lines

Task No	Sales Line	Plan Line ID	Cost Type	Cost	Invoiced Cost	Quantity	Quantity to Invoice	Alt Customer No	Revenue %	Markup %	Discount %	Sal
623	4		Personnel	0.00		2	2		0		0	10
623	5	1306	Material	35.00		1	1		0		0	P3
623	6	1307	Material	8.50		1	1		0		0	VT
623	7		Personnel	0.00		0.5	0.5		0		0	10

Cost Lines

Task No	Cost Line	Plan Line ID	Cost Type	Cost	Cost Amount	Quantity	Sales Line	Transaction Status
623	185		Personnel	0.00	0	2	4	Reported
623	186	1306	Material	35.00	35	1	5	Not Applicable
623	187	1307	Material	8.50	8.5	1	6	Not Applicable

Cost lines can be authorized using **Authorize** or **Authorize All**. The **Invoice Preview** button allows the creation of an invoice preview, either grouped by request or by individual scope.

X New Invoice Preview

Options

Create New
 Add to Invoice Preview
 Auto Select

Group Invoice Lines

Based on Sales Part
Based on Group Level *

Criteria

Only Completed Scopes Negative Lines only

OK Cancel

Invoicing Info on the Task Sales lines shows whether these sales lines have been included in an invoice preview. Additional sales lines may be added, for example if more hours or expenses are reported.

Line No	Cost Type	Sales Part Site	Sales Part No	Description	Quantity	Quantity to Invoice	Unit Sales Price/Curr	Sales Price Amount/Base	Sales Price Amount/Curr	Prel Invoice No	Invoice No
25	Personnel	2501	10.01	Normal Time	2.5	2.5	100.00	250.00	250.00		
26	Personnel	2501	10.02	Travel Time	1.5	1.5	25.00	37.50	37.50		
27	Material	2501	P3509845	Electrical wiring box	1	1	35.00	0.00	0.00		

Back on the Request, **Invoice Preview** now allows adding the new sales lines to the existing invoice preview. **Add to Invoice Preview** allows the user to select an existing preview manually. **Auto Select** picks the most recent matching invoice preview automatically. If no matching invoice preview is found, one or multiple new invoice previews are created.

New Invoice Preview

Options

Create New
 Add to Invoice Preview
 Auto Select

Relevant Invoice Previews are available

Options

Add	To	Invoice Preview	Customer	Invoice Scope	Scope Reference	Delivery Address
<input checked="" type="checkbox"/>		3	NL20103	Request	310	A12-001

OK **Cancel**

Invoice Preview/s on the Request header indicates that a preview has been generated.

« 309 - HVAC Repair ▾ 1 of 1 Completed

Request ID: 309 **Description:** HVAC Repair **Customer:** NL20103 - Van Buren Hotel Ams...

General Information

Base Currency	Invoice Curren...	Sales Site	Invoice Preview/s	Invoice/s
EUR	EUR	2501 - Ventechi Netherlands	<input checked="" type="checkbox"/> Yes	No
Customer Refer...	Customer Order Type	Customer Order No		

Clicking **Yes** navigates to the preview. The pie chart illustrates the Sales Line Distribution based on Cost Types. The **Amounts** section shows Total Net Amount, Total Cost and Total Margin of the Invoice Preview.

Service Management > Request Management > Invoicing and Closure > Invoice Preview

Invoice Preview

Search (1)

Sort by: 3 of 1 Draft

VA
Van Buren Hotel Amsterdam-Amstel
Reference: 310
Draft
Created: 7/17/25, 8:02 AM

Invoice Preview ID	Invoice Scope	Reference	Sales Line Distribution								
3	Request	310	Material: 0 (0%) Personnel: 287.5 (100%)								
Customer	Delivery Address	Company									
NL Van Buren Hotel Amsterda...	A12-001	25 - Ventech Netherlands									
Site	Coordinator *	IA IFS APPLICATIONS									
2501 - Ventech Netherlands											
Amounts											
Total Net Amount 287.50 EUR	Total Cost 35.00 EUR	Total Margin 252.50 EUR									
Invoice Lines											
<input type="button" value="Add Sales Lines"/> 24											
Service Invoice Line	Cost Type	Sales Part Site	Sales Part No	Sales Part Description	Quantity to Invoice	Currency Rate	Sales Price Amount/Curr	Sales Price Amount/Base	Sales Price	Base Price	Revenue %
1 Personnel	2501	10.02	Travel Time		1.5	1	37.50	37.50	25.00	25.00	100.00
2 Personnel	2501	10.01	Normal Time		2.5	1	250.00	250.00	100.00	100.00	100.00
3 Material	2501	P3509845	Electrical wiri...		1	1	0.00	0.00	35.00	35.00	
							Σ 287.50	Σ 287.50			

While the invoice preview is still in Draft status, **Add Sales Lines** allows the user to add sales lines that are still in status “No Preview”.

Add Sales Lines

Sales lines are filtered based on Request ID, Customer, Authorize Code, Delivery Address, Currency and Customer Order No

Sales Lines

Task	No	Description	Sales Line No	Sales Part No	Sales Part Site	Qty To Invoice	Quantity	Revenue %
<input checked="" type="checkbox"/>	637	General Expenses	28	10.11	2501	1	1	100

Sales lines can be adjusted directly on the invoice preview (Sales Part, Quantity to Invoice, Unit Sales Price, Discount and Markup). A message on the invoice preview header indicates that sales lines and invoice preview lines are no longer aligned, **Regenerate Lines** updates the invoice preview.

Service Management > Request Management > Invoicing and Closure > Invoice Preview

Invoice Preview

Search (1)

Sort by: 3 of 1 Draft

Van Buren Hotel Amsterdam-Amstel
Reference: 310
Draft
Created: 7/17/25, 8:29 AM

Sales lines have been modified - Regenerate the Invoice Lines.

Sales Line Distribution												
Amounts												
Invoice Lines												
(1) Service Invoice Line	Cost Type	Sales Part Site	Sales Part No	Sales Part Description	Quantity to Invoice	Currency Rate	Sales Price Amount/Curr	Sales Price Amount/Base	Sales Price	Base Price	Revenue (%)	Markup (%)
1 Personnel	2501	10.02	Travel Time		1.5	1	37.50	37.50	25.00	25.00	100	0
2 Personnel	2501	10.01	Normal Time		2.5	1	250.00	250.00	100.00	100.00	100	0
3 Material	2501	P3509845	Electrical wir...		1	1	0.00	0.00	35.00	35.00	0	0
4 Expenses	2501	10.11	General Exp...		1	1	60.00	60.00	60.00	60.00	100	0
SALES LINES												
Request ID	Request Scope ID	Service ID	Task No	Sales Part Description	State	Allowed to Credit	Sales Part No	Quantity to Invoice	Quantity	Revenue (%)	Unit Sales Price/Curr	Sales Price Amount/Base
310	312	20	637	General Expenses	Invoiceable	No	10.11	1	1	100	80	80

Once the Status has been set to **Approved**, IFS Cloud will create a Customer Order associated to that invoice preview. This is done using a batch process (or online, "Approve Invoice Online" is set to TRUE on the Site>Maintenance), and when this is completed the system will show a **Customer Order Number** and the View>Customer Order command becomes available.

Invoice Preview 6 of 1 Approved

View Status

Customer Order (highlighted)

Invoice Preview ID	Request	Currency Code	Customer No	Customer Name	Cust Order No
6	Request - Cost and Sales	EUR	NL20101	Amazing Web Services Zandvoort	*1009
Cust Order Type	Invoice Scope	Scope Ref	Coordinator	Delivery Address	Credit Invoice
SEO	Request	1455	*	A12-001	No

One Time Generation of Invoice Previews (25R1★)

Service Management>Request Management>Invoicing and Closure>Generate Invoice Preview for Service

The creation of Invoice Previews can be automated.

Generate Invoice Preview for Service

 Task Options
 Schedule

Generate For Following

Company *	Service Organization	Service Delivery Unit	Customer
25 - Ventechi Netherlands	2501 - Ventechi Netherlands		

Request Contract

--

Start Option

Start now
 Run in background
 Schedule

Include Transactions

From When	Date From	To When	Date To
Start of This Month	6/1/2025	Now	6/10/2025

Group Invoice Lines

Based on Sales Part Based on Transaction ... Based on Group Level No

Criteria

Only Completed Scopes Only Negative Lines

[◀ Previous](#) [Next ▶](#) [Finish](#) [Cancel](#)

Invoice Preview/s will be created for the sales lines reported within the period specified under *Include Transactions*. Invoice Preview lines can be grouped based on Sales Part, Transaction Date, or Request/Request Scope.

With Start Option=**Schedule** it is possible to specify parameters for the recurring automatic creation of invoice preview.

Generate Invoice Preview for Service

Task Options Schedule

Generate for following

Company 25 - Ventechi Netherlands	Service Organization 2501 - Ventechi Netherlands	Service Delivery Unit	Customer
--------------------------------------	---	-----------------------	----------

Request Contract

Schedule

Name * Generate Invoice Preview

Options

- Daily
- Weekly
- Monthly
- Date
- Interval
- Custom

Time * 12:00 AM

Date Interval

Start Date * 6/10/2025 End Date

Background Options

Set as Active

Check Executing

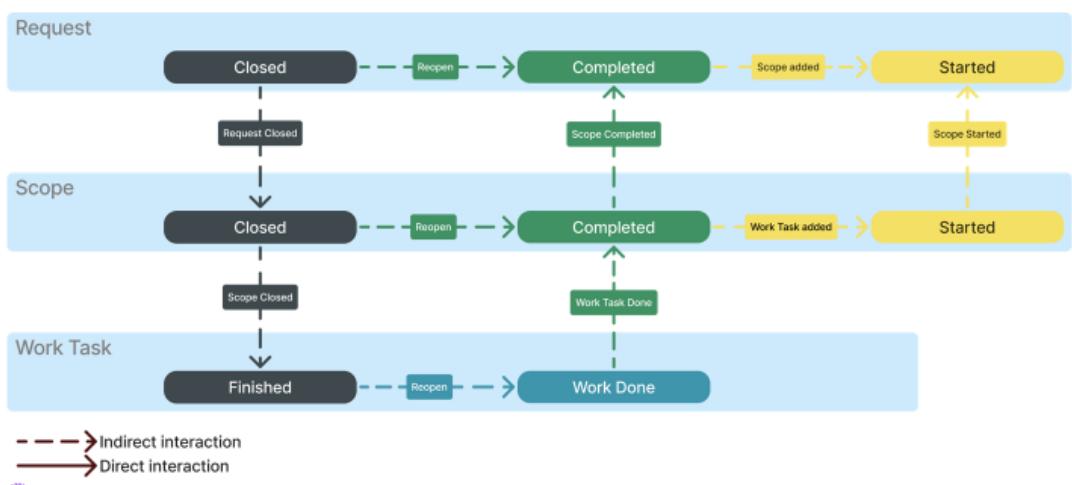
Language Code * English - English

◀ Previous ▶ Next Finish Cancel

Request Status Handling (📝)

Request, Scope, and Work Task statuses exist to drive the business process. Forward status handling is available, and it's also possible to go backwards in the process flow and modify certain things or perform additional activities. Closed Requests, Request Scopes and Work Tasks can be re-opened and new Work Tasks/Scopes can be added to Completed Scopes/Requests. This makes it possible to invoice missed/forgotten items after closure.

Request Management Usability - Enhanced Status Handling Concept



Note: At present, the system does not automatically close the Request upon completing the scopes due to potential impacts on invoicing.

Request creation from Customer Orders (25R1★)

In the described process, a Request is initiated from scratch, leading to the creation of a customer order and a customer invoice after work execution. Alternatively, a Request can be created directly from an existing Customer Order, which will also facilitate invoicing. This method transfers customer details to the Request, ensuring visibility of the Customer Order and Customer Order Type, and allowing flexibility to modify the Customer Order Type on the Request or Request Scope.

The screenshot shows the IFS Customer Order interface. In the top right corner of the main table, there is a red box around the "New Request" button. The table displays columns for Order No, Customer, Site, and Wanted Delivery Date/Time. The order details shown are: Order No 11473, Customer VB NL20103 - Van Buren Hotel Amsterdam-Amstel, Site 2501, and Wanted Delivery Date/Time 4/23/25, 12:00 AM.

The newly created Request and Scope show the Customer Order Number and Customer Order Type.

The screenshot shows the IFS Request screen for request ID 3. It displays the Request Information section where the Customer Order Type is set to "NO - NORMAL ORDER" and the Customer Order No is 11473. The Location and Address section shows the address: 913 - Joan Muyserweg 20, NL 1096 CJ Amsterdam, NL - NETHERLANDS (THE). The bottom part of the screen shows the Service tab with a table listing service details. A red box highlights the "Customer Order No" and "Customer Order Type" fields in this table, both of which are now populated with the values from the request.

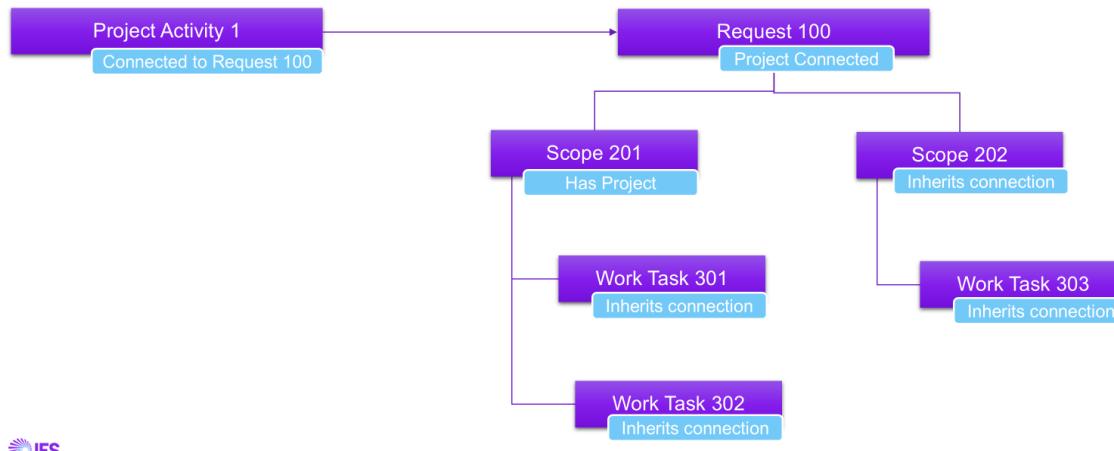
Project Connection to Request (25R1★)

For Enterprise Service customers managing large projects, aligning service-related work with project management is essential. With Project Connections to Requests, Request Management seamlessly connects with Project Management, allowing customers to leverage both solutions. This ensures better coordination, streamlined workflows, and enhanced visibility of service work done within the scope of a project.

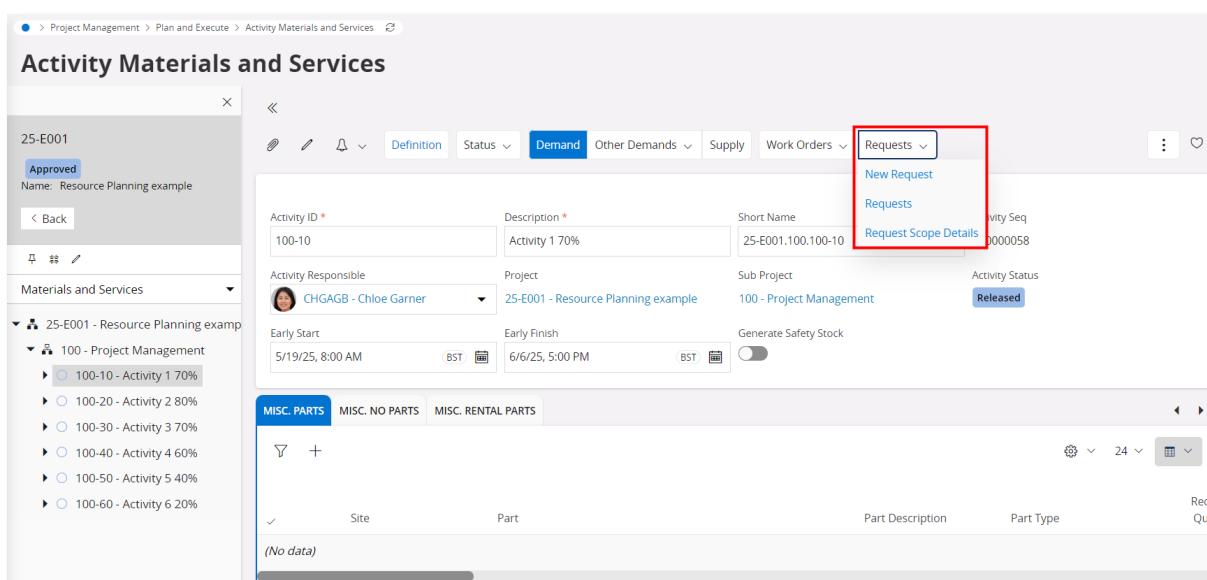
Connect Request and Project Activity (25R1★)

Request Management: Project Connection to Request Concept

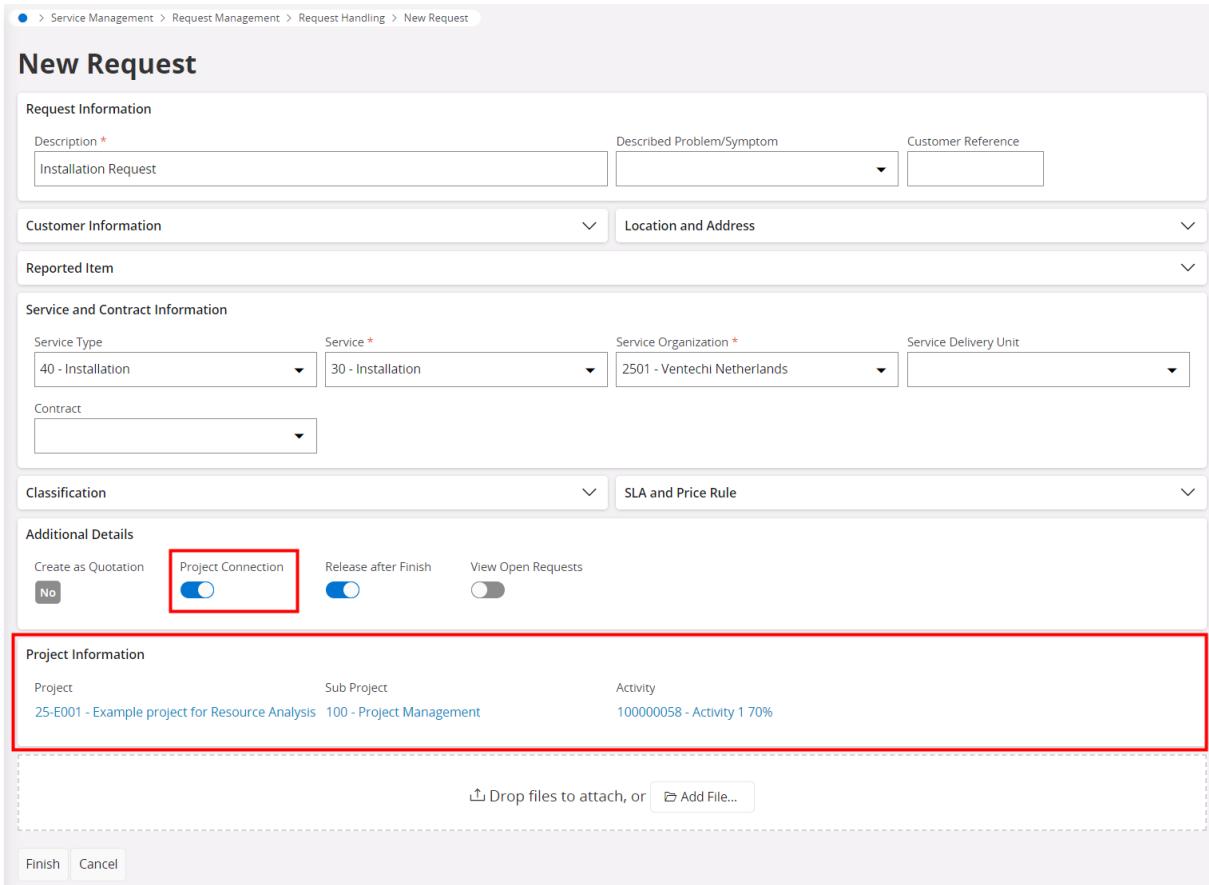
Project Connection from Project Activity (PA)



To connect Project Activities and Requests from the Projects side, navigate to the Project's **Activity Materials and Services** page. Use **New Request** to create a new Request directly from the Project Activity.



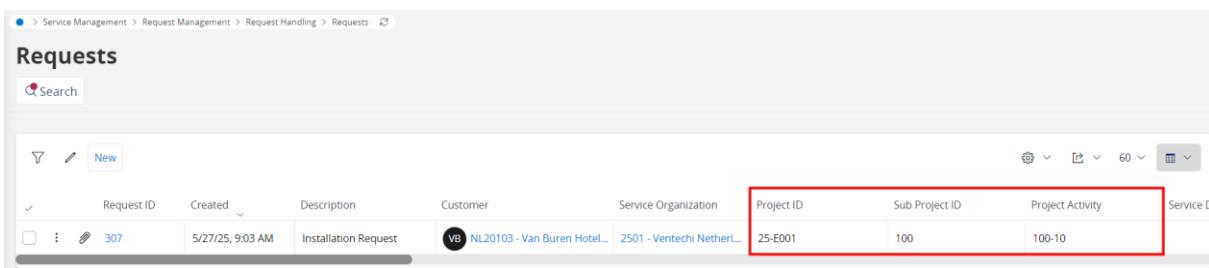
This will open the **New Request Assistant** with a pre-populated connection to the Project, showing Project, Sub-Project, and Project Activity. If the Request was created from the Project or Sub-Project node, the Project Activity needs to be selected manually. All other details can be specified similar to the creation of a standalone Request.



The screenshot shows the 'New Request' form in the IFS application. The 'Project Connection' toggle switch is highlighted with a red box. The 'Project Information' section is also highlighted with a red box, showing a connected project: 25-E001 - Example project for Resource Analysis, 100 - Project Management, with Activity 100000058 - Activity 1 70%.

Note: Requests can only be created for Projects with status **Started** or **Approved**.

The new Request is connected to Project, Sub-Project, and Project Activity.



The screenshot shows the 'Requests' list page. The newly created request (ID 307) has a 'Project Connected' badge next to it. The table rows show the request details: Request ID 307, Created 5/27/25, 9:03 AM, Description Installation Request, Customer NL20103 - Van Buren Hotel..., Service Organization 2501 - Ventechi Netherl..., and Project ID 25-E001, Sub Project ID 100, Project Activity 100-10.

It will also show a “Project Connected” badge, and the underlying Scopes and Tasks automatically inherit the project connection.

Service Management > Request Management > Request Handling > Request Details

Request

Search (1)

Sort by ▾

307
Description: Installation Request
Created: 5/27/25, 9:03 AM
Created By: TISCNL
Customer: NL20103
Source: Manual

New

Request ID: 307 Description: Installation Request Customer: NL20103 - Van Buren Hotel Amsterdam-Amstel Primary Contact:

Request Information SLA Commitments: No Active Commitments on this Request Customer Reference: Customer Order Type: Customer Order No: Project Connected

Location and Address Location: Address: Open Map

Classification

Services Tasks SLA Price Summary Contacts Service Notes Surveys and Answers

Add Service

Service	Invoicing Process	Scope Status	Project	Sub Project	Project Activity	Connection Type	Re
30 - Installation	Normal	No	2501	New	25-E001 - Example proj...	100 - Project Management...	100-10 - Activity 1 70%

To create a Request and manually associate it to a project, use the **Project Connection** toggle and select the Project Activity.

Service Management > Request Management > New Request

New Request

Request Information

Description * Customer Reference

Customer Information Location and Address

Reported Item

Service and Contract Information

Classification SLA and Price Rule

Additional Details

Create as Quotation Project Connection Release after Finish

Project Information

Project: 25-E001 - Example project for Resource Analysis Sub Project: 100 - Project Management Activity: 100000058 - Activity 1 70%

Finish Cancel

To connect an existing Request to a Project, use **Connect to Activity** on the Request Scope. The **Apply to Connected Services** toggle connects all Scope to the selected Project Activity.

Note: The user needs to have access to the Project's site to be able to select the Project Activity.

Service Management > Request Management > Request Handling > Request Details

Request

Search (1)

Sort by: 295 - Repair Request 1 of 1

Released

Description: Repair Request
Created: 5/26/25, 4:18 PM
Created By: TISCLN
Customer: NL20103
Source: Manual

Request ID	Description *	Customer	Primary Contact
295	Repair Request	NL20103 - Van Buren Hotel Amsterdam-Amst...	RE Rene Hogerhand

Request Information

Classification

Location and Address

Ownership

SERVICES TASKS SLA PRICE SUMMARY CONTACTS SERVICE NOTES SURVEYS AND ANSWERS

Project Connection

Connect to Activity

Add to Open Invoice Prev... Service Organization Scope Status Project Sub Project Pro

(1) Service Invoicing Process Normal No 2501 Cancelled

20 - Corrective Maintenance Normal No 2501 New

20 - Corrective Maintenance

When a Project Activity is connected, additional commands become available.

Service Management > Request Management > Request Handling > Request Details

Request

Search (1)

Sort by: 308 - Repair Request 1 of 1

New

Description: Repair Request
Created: 5/27/25, 9:51 AM
Created By: TISCLN
Customer: NL20103
Source: Manual

Request ID	Description *	Customer	Primary Contact
308	Repair Request	NL20103 - Van Buren Hotel Amsterdam-Amst...	

Request Information

Classification

Location and Address

Ownership

SERVICES TASKS SLA PRICE SUMMARY CONTACTS SERVICE NOTES SURVEYS AND ANSWERS

Project Connection

Connect to Activity

Add to Open Invoice Prev... Service Organization Scope Status Project Sub Project Project Activity Connection Typ

(1) Service Invoicing Process Normal No 2501 New 25-E001 - Example proj... 100 - Project Managem... 100-10 - Activity 1 70%

30 - Installation Normal No 2501 New

30 - Installation

Disconnect from Activity removes the connection between the Request/Scope and Project Activity. **Activity** navigates to the Project Activity, **Project Connection Details** shows details of the Project Activity.

X

Project Information

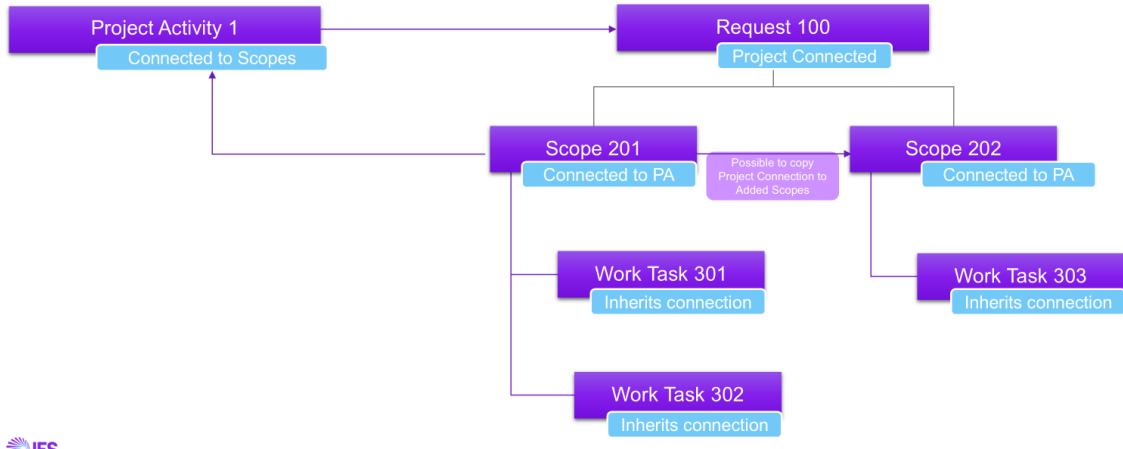
Program ID	Program Description	Project ID	Project Name
		25-E001	Resource Planning example
Sub Project ID	Sub Project Description	Activity ID	Activity Description
100	Project Management	100-10	Activity 1 70%
Activity Sequence	Activity Status	Early Start	Early Finish
100000058	Released	5/19/25, 8:00 AM	6/6/25, 5:00 PM

Connect Multiple Project Activities to Request Scopes (25R1★)

When a Request is already connected to a Project Activity, a new Scope can copy the Project Connection from the existing Scope.

Request Management: Project Connection to Request Concept

Project Connection from Request Scope



Below is an example of a Request with three Scopes, each one connected to a different Project Activity.

Service	Description	Invoicing Process	Service Organization	Scope Status	Project	Sub Project	Project Activity	Connection Type
10 - Preventive Maintenance	Normal	No	2501	New	25-E001 - Example proj...	100 - Project Managem...	100-10 - Activity 1	70%
20 - Corrective Maintenance	Normal	No	2501	New	25-E001 - Example proj...	100 - Project Managem...	100-20 - Activity 2	80%
30 - Installation	Normal	No	2501	New	25-E001 - Example proj...	100 - Project Managem...	100-30 - Activity 3	70%

When adding another Service/Scope, the user can choose the Scope from which the Project Connection should be copied.

Add Service

Service and Contract Information		Location and Address													
Service Type 30 - Provisioning	Service * 40 - Provisioning	Region	Location												
Problem/Symptom	Service Organization 2501 - Ventechi Netherlands	Address	New Location												
Contract	Service Delivery Unit	Address													
		Open Map													
Reported Item															
Model	Object	Show all Objects	Under Warranty No												
Urgency		SLA and Price Rule													
Filter Urgency based on Service <input checked="" type="checkbox"/>	Urgency	SLA Template 10 - Bronze	SLA Source Service												
		Price Rule 10 - Premium Pricing	Price Rule Sour... Service												
Settings															
<input checked="" type="checkbox"/> Copy Project Information															
Project Details List															
<table border="1"> <thead> <tr> <th>Project</th> <th>Sub Project</th> <th>Activity</th> </tr> </thead> <tbody> <tr> <td>25-E001 - Resource Planning example</td> <td>100 - Project Management</td> <td>100-10 - Activity 1 70%</td> </tr> <tr> <td>25-E001 - Resource Planning example</td> <td>100 - Project Management</td> <td>100-20 - Activity 2 80%</td> </tr> <tr> <td>25-E001 - Resource Planning example</td> <td>100 - Project Management</td> <td>100-30 - Activity 3 70%</td> </tr> </tbody> </table>				Project	Sub Project	Activity	25-E001 - Resource Planning example	100 - Project Management	100-10 - Activity 1 70%	25-E001 - Resource Planning example	100 - Project Management	100-20 - Activity 2 80%	25-E001 - Resource Planning example	100 - Project Management	100-30 - Activity 3 70%
Project	Sub Project	Activity													
25-E001 - Resource Planning example	100 - Project Management	100-10 - Activity 1 70%													
25-E001 - Resource Planning example	100 - Project Management	100-20 - Activity 2 80%													
25-E001 - Resource Planning example	100 - Project Management	100-30 - Activity 3 70%													
<input type="button" value="Finish"/> <input type="button" value="Cancel"/>															

All connected Activities are also visible on the Request.

Service Management > Request Management > Request Handling > Requests

Requests

Requests									
Search		List View							
	Request ID	Created	Description	Customer	Service Organization	Project ID	Sub Project ID	Project Activity	Service Delivery Unit
<input type="checkbox"/>	308	5/27/25, 9:51 AM	Repair Request	VB	NL20103 - Van Buren Hotel...	2501 - Ventechi Netherl...	25-E001, 25-E001, 25-E001	100, 100, 100	100-20, 100-10, 100-30

Pre-Posting on Request Scopes (25R1★)

When a project is connected to a Scope, the existing Pre-Postings will be updated with Project and Activity sequence information. Pre-Postings are defined on the Request Scope.

Service Management > Request Management > Request Handling > Request Details

Request

Search (1)

Sort by ▾ << 307 - Installation Request ▾ 1 of 1 New

Request ID 307	Description * Installation Request	Customer VB NL20103 - Van Buren Hotel Amsterdam-Amstel	Primary Contact
Request Information		Location and Address	
Classification		Ownership	
SERVICES TASKS SLA PRICE SUMMARY CONTACTS SERVICE NOTES SURVEYS AND ANSWERS Pre Posting			
Add to Open Invoice Prev... Service Organization Scope Status Project Sub Project Project Activity Connection Type			
(1) Service Invoicing Process No 2501 New 25-E001 - Example proj... 100 - Project Managem... 100-10 - Activity 1 70%			

It is possible to define Pre-Postings to the Request Scope level through the **T61 – Pre Accounting Request Scope** posting type.

Accounting Rules > Posting Rules > Posting Control

Posting Control

Search

Posting Type	Code Part Name	Control Type	Default Value No Details	Default Value No CT Value	Override	Valid From	Module
<input type="checkbox"/> T61 - Pre Accounting Request Scope	Cost Ctr	AC2 - Pre posting			Not Allowed	2/25/2025	REQMGT
<input type="checkbox"/> T61 - Pre Accounting Request Scope	Product	AC2 - Pre posting			Not Allowed	3/4/2025	REQMGT

Call Center Handover (25R1★)

The Call Center/Case Management solution facilitates case handling by allowing issues to be logged, categorized, and transferred to the relevant business object (application area) for further processing. The seamless integration with Request Management allows customers to use the Call Center as an entry point for logging and progressing cases.

Request Management: Call Center Handover Concept





Supporting Call Center Business Objects (25R1★)

 Relationship Management>Call Center>Basic Data>Support Organization Basic Data>Business Object

Call Center Business Objects are used to manage and handle cases initiated by customer contacts. These objects help in registering and processing requests for support, which can be initiated through various channels such as phone calls, emails, or faxes. The business objects connected to a case provide essential information about the case, such as contact information, case classification, and case description. They are crucial for ensuring that all cases are handled in accordance with customer agreements and general policies.

Three Business Objects are used to support the Request Management flow: Request, Request Contract, and Model.

● > Relationship Management > Call Center > Basic Data > Support Organization Basic Data > Business Object

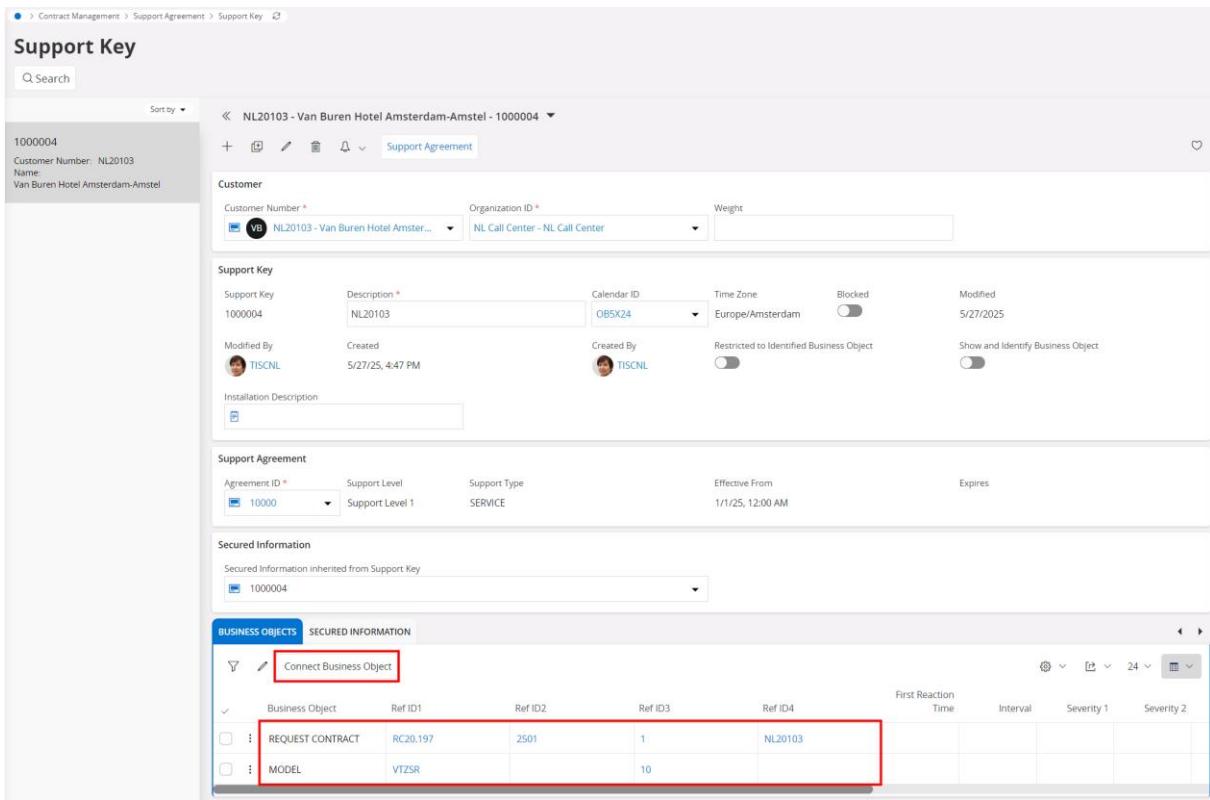
Business Object										
	Business Object		Description	Business Object Type	Attach LOV Order	Handover LOV	Open Form Default	Process Handover Before Finishing Task	View TAB Order	Validity
<input type="checkbox"/>	REQUEST	Service Request	Request		65	5	No	Yes	No	Active
<input type="checkbox"/>	MODEL	Model	Model		55		No	No	No	Active
<input type="checkbox"/>	REQUEST CONTRACT	Request Contract	Request Contract		115		No	No	No	Active

Support Keys (25R1★)

 Contract Management>Support Agreement>Support Keys

A support key is used to enter support information for a customer, including details such as the name of the support organization, installation description, support type, and support level. It can be created directly through the Support Key or derived from an existing Support Agreement. When a support key is created from a support agreement, it copies details like the customer information, support organization, work calendar, time zone, support type, and support level. This information can be modified independently of the support agreement. The support key is essential for creating a case for a particular customer.

The **Request Contract** and **Model** Business Objects can also be used in a Support Key.



Business Object	Ref ID1	Ref ID2	Ref ID3	Ref ID4
REQUEST CONTRACT	RC20.197	2501	1	NL20103
MODEL	VITZSR		10	

Task Activities for Requests (25R1★)

 Relationship Management>Call Center>Basic Data>Case Task Basic Data>Task Activity

A Task Activity is a component used to define specific activities for a particular task type within a case task. Each case task can consist of one or more activities that need to be performed to complete the task, such as analyzing a problem or verifying a correction. Task activities serve as templates from which information is initially copied, but any changes made to the task activity later will not affect the case task or the task template. Pre-selected task activities can be automatically added to new cases, and you can configure them to open certain dialogs or pages automatically to streamline the process.

When defining a Task Activity, it is possible to use **Request** as the Handover Business Object, which will be a handover reference for the corresponding Task Activity upon case creation.

Relationship Management > Call Center > Basic Data > Case Task Basic Data > Task Activity

Task Activity

Activity	Description	Task Type	Case Task Comment	LOV Order	Pre Selected	Dispatch	Handover Business Object	Open On New Cases	Work Days	Work Hours	Calculate Date
GENERAL SERVICE	General Services	1ST LINE	<input type="button" value="Edit"/>	10	No	No		Yes			Today
VERIFICATION	General Case Task - Verification	1ST LINE	<input type="button" value="Edit"/>	20	No	No		Yes	1	5	Previous Due Date
HVAC SERVICE/REPAIR	HVAC Service/Repair	REPAIR	<input type="button" value="Edit"/>	15	No	No	REQUEST	Yes			Today

Case Task Templates (25R1★)

Relationship Management>Call Center>Basic Data>Case Task Basic Data>Case Task Template

A case task template is a predefined set of activities that can be used to create new case tasks efficiently. It allows you to group activities that have already been defined, modify the time needed to complete each activity, and specify the method for calculating the time required. When a task template is connected to a case category, it will be automatically used for cases within that category. This helps streamline the process of handling case tasks by providing a structured approach to task management.

Relationship Management > Call Center > Basic Data > Case Task Basic Data > Case Task Template

Case Task Template

Task Template											
Template ID	Template Name *	Description *									
120	HVAC SERVICES	Procedure for HVAC service handling									
<input checked="" type="checkbox"/> Set Task ID from Template...											
Task Template Item											
Task ID	Activity	Description	Task Type	Comments	Work Days	Work Hours	Calculate Date	Handover Business Object	Service	Open On New Cases	Validity
1	HVAC SERVICE/REPAIR	HVAC Service/Repair	REPAIR				Today	REQUEST	20 - Corrective Maintenance	Yes	Active

The use of the Handover Business Object **Request** in the Case Task Template allows the automatic creation of a Request and its use as a handover reference for the corresponding Task Activity. In this case it is mandatory to select a **Service** from the Service Catalog (see [Service Catalog \(25R1p\)](#)).

When a Request is created, the Service Organization is selected based on Service Organization Selection Rules (see [Selection Rules for Service Organizations \(25R1p\)](#)). If no rule applies, the Default Service Organization for the Service is selected. If there is no default set, the Request will not be created, but the Case will be, allowing the user to utilize the manual handover method.

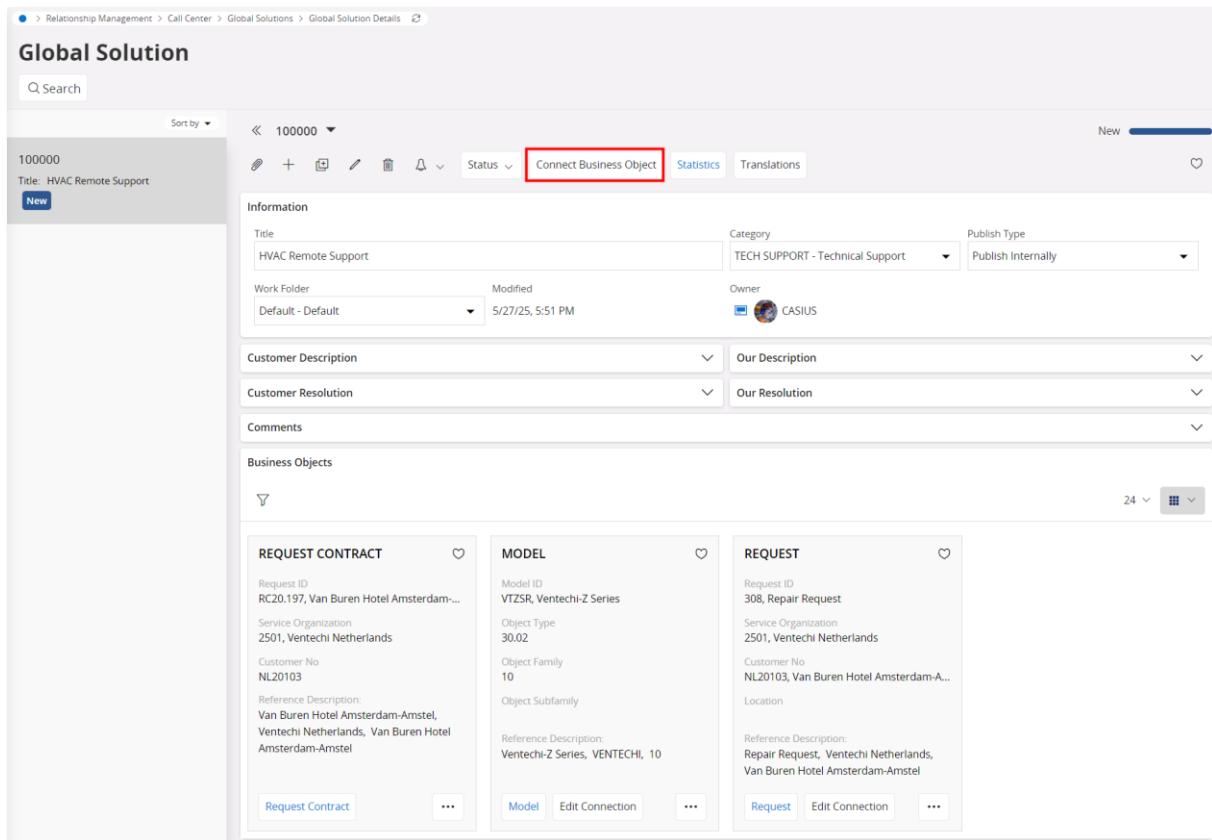
Global Solutions (25R1★)

Relationship Management>Call Center>Global Solutions>Global Solutions

A global solution is a generic solution description that addresses a problem, which can be based on one or more cases. It can be created from a specific case or independently without a case. The

global solution documents the problem and specifies the resolution, making it useful for finding solutions to similar cases through a search. The accessibility of a global solution is determined by its publish type, which specifies whether it is accessible externally, internally, or not accessible at all. Global solutions are associated with the case from which they originated and can be connected to business objects. They are owned by the organization that created them but can be dispatched to another organization. Once completed, a global solution can be approved by the solution owner, making it accessible within specified parameters.

Global Solutions can optionally be linked to Requests, Request Contracts, and Models using **Connect Business Objects**. These need to be defined upfront, see [Supporting Call Center Business Objects \(25R1★\)](#).



The screenshot shows the 'Global Solution' details page in the IFS Cloud interface. The top navigation bar includes 'Relationship Management > Call Center > Global Solutions > Global Solution Details'. The main area is titled 'Global Solution' and shows a list item for '100000 HVAC Remote Support'. Below the list is a form with tabs: 'Information', 'Statistics', and 'Translations'. The 'Information' tab is active and contains fields for 'Title' (HVAC Remote Support), 'Category' (TECH SUPPORT - Technical Support), and 'Publish Type' (Publish Internally). It also displays 'Work Folder' (Default - Default), 'Modified' (5/27/25, 5:51 PM), and 'Owner' (CASIUS). Below this are sections for 'Customer Description' and 'Customer Resolution', each with a 'Our Description' dropdown. A 'Comments' section is present. At the bottom, there's a 'Business Objects' section with three cards: 'REQUEST CONTRACT', 'MODEL', and 'REQUEST'. The 'REQUEST CONTRACT' card shows details for a repair request. The 'MODEL' card shows details for a VENTECHI-Z Series model. The 'REQUEST' card shows details for a repair request. Each card has buttons for 'Request Contract', 'Model', 'Edit Connection', and '...'. A red box highlights the 'Connect Business Object' button in the top right of the 'Information' tab.

Create Request from Case (25R1★)

 [Relationship Management>Call Center>Cases>Case Details](#)

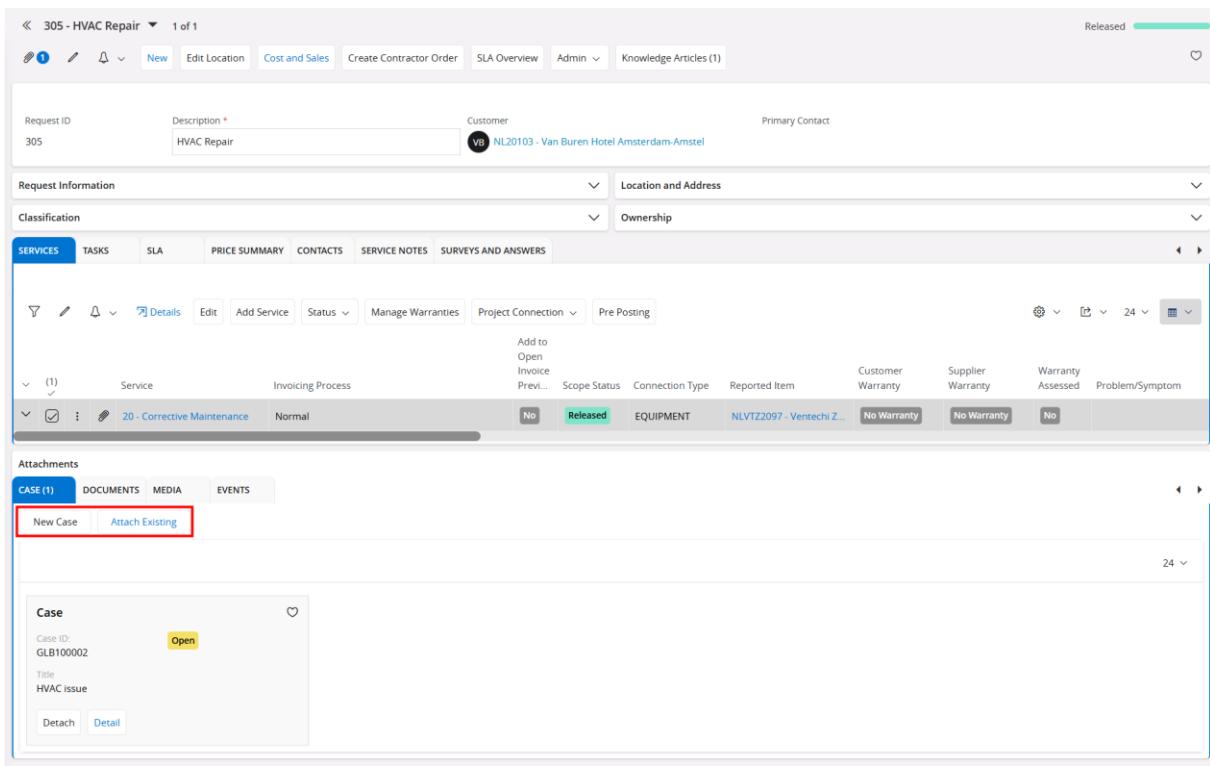
On the case task list, select **New from Template** and choose a template (see [Case Task Templates \(25R1★\)](#)). This will automatically create a Task, and a Request linked to the task.

Task ID	Activity	Task Type	Status	Task Owner	Owning Organization	Severity	Handover Reference	Handover ID	Service	Activi...
100	HVAC SERVICE/REPAIR	REPAIR	Open	Tina Scheers (TISC...)	NL Call Center - NL Call ...	3 NORMAL	REQUEST	307	20 - Corrective Mainten...	

The **Handover Reference** command navigates to the newly created Request. **Disconnect Handover Reference** removes the reference from the Case to the Request; however, the Request will still have the link back to the Case.

It is also possible to manually create a **New Handover Reference** i.e.; a new Request will be created and associated with the Case/Task.

Finally, it's also possible to link a Request to a new or existing Case using the Attachment panel.



First Time Fix Prediction (FTFP) ⚡ (25R1★)

In field service operations, maintaining a high First-Time Fix Rate (FTFR) is important for operational efficiency and customer satisfaction. The industry average FTFR, however, is approximately 77%, indicating that nearly one in four service tasks require a follow-up visit. These repeat visits result in higher operational costs, reduced asset uptime, and decreased customer trust.

Factors contributing to low FTFR include unavailable parts or assets, inaccurate problem diagnosis, and gaps in technician skills. By predicting and addressing these challenges in advance, organizations can improve first-time fix performance, enhance productivity, and deliver better service outcomes.

The First-Time Fix Prediction (FTFP) feature leverages a machine learning model to analyze historical Request and Task data, thereby predicting the probability of resolving a job on the initial visit. By identifying tasks with a low first-time fix likelihood, it enables Contact Center Agents and Dispatchers to implement proactive measures, ensuring enhanced preparation, optimal scheduling, and improved service efficiency.

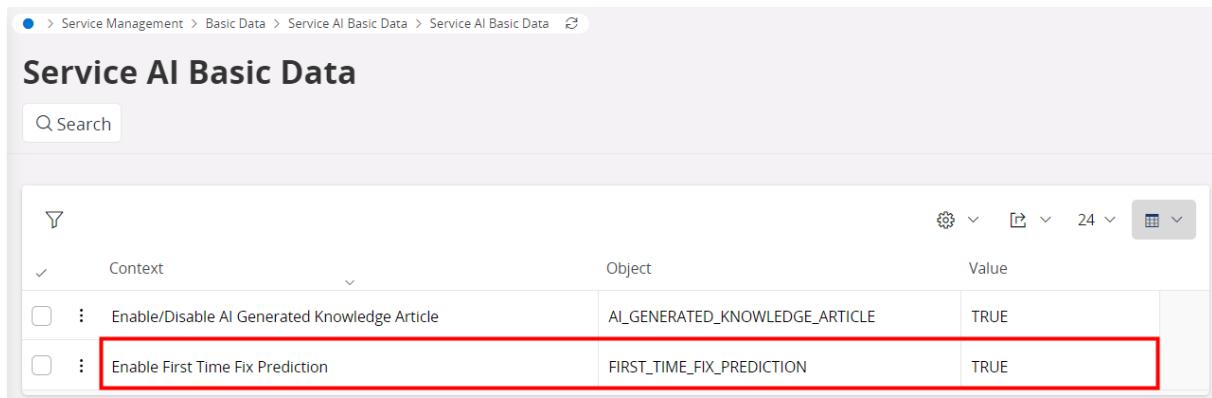
Benefits include:

- **Reduce Re-visits:** Fewer follow-up appointments
- **Improve Customer Satisfaction:** Faster, more reliable service
- **Optimize Parts & Logistics:** Better availability and placement of parts
- **Cost Efficiency:** Lower service costs from reduced admin, mileage, and subcontracting
- **Technician Support:** Enhanced preparedness through training and materials
- **Higher Uptime:** Improved asset availability increases revenue

Setup First Time Fix Probability (25R1★)

📁 Service Management>Basic Data>Service AI Basic Data>Service AI Basic Data

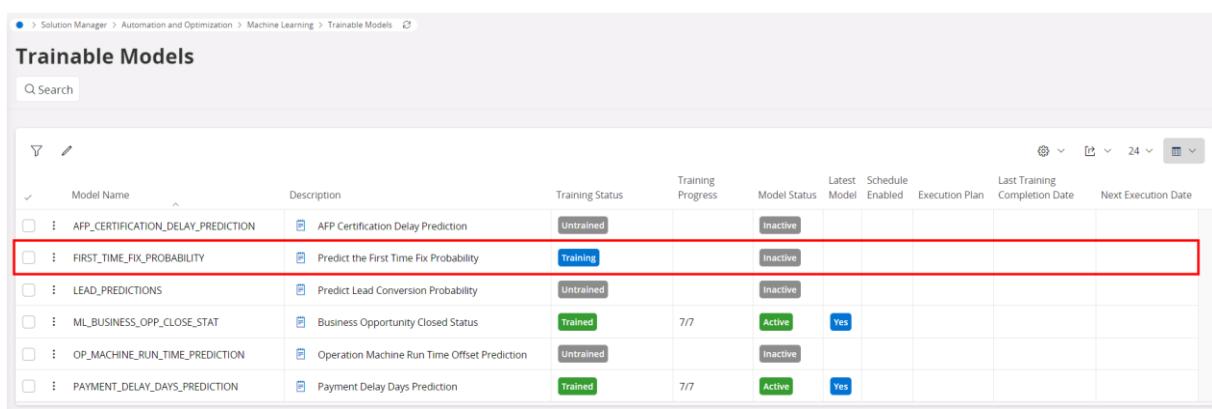
To utilize the FTFP feature, Enable First Time Fix Prediction setting must be set to TRUE.



The screenshot shows a table with three columns: Context, Object, and Value. The 'Enable First Time Fix Prediction' row is highlighted with a red border. The 'Object' column contains 'FIRST_TIME_FIX_PREDICTION' and the 'Value' column contains 'TRUE'.

Context	Object	Value
<input type="checkbox"/> Enable/Disable AI Generated Knowledge Article	AI_GENERATED KNOWLEDGE ARTICLE	TRUE
<input type="checkbox"/> Enable First Time Fix Prediction	FIRST_TIME_FIX_PREDICTION	TRUE

ML Models are maintained at 📁 Solution Manager>Automation and Optimization>Machine Learning>Trainable Model.



The screenshot shows a table with columns: Model Name, Description, Training Status, Training Progress, Model Status, Latest Model, Schedule, Execution Plan, Last Training Completion Date, and Next Execution Date. The 'FIRST_TIME_FIX_PROBABILITY' model is highlighted with a red border. Its status is 'Training' and it is currently 'Inactive'.

Model Name	Description	Training Status	Training Progress	Model Status	Latest Model	Schedule	Execution Plan	Last Training Completion Date	Next Execution Date
<input type="checkbox"/> AFP_CERTIFICATION_DELAY_PREDICTION	AFP Certification Delay Prediction	Untrained		Inactive					
<input type="checkbox"/> FIRST_TIME_FIX_PROBABILITY	Predict the First Time Fix Probability	Training		Inactive					
<input type="checkbox"/> LEAD_PREDICTIONS	Predict Lead Conversion Probability	Untrained		Inactive					
<input type="checkbox"/> ML_BUSINESS_opp_CLOSE_STAT	Business Opportunity Closed Status	Trained	7/7	Active	Yes				
<input type="checkbox"/> OP_MACHINE_RUN_TIME_PREDICTION	Operation Machine Run Time Offset Prediction	Untrained		Inactive					
<input type="checkbox"/> PAYMENT_DELAY_DAYS_PREDICTION	Payment Delay Days Prediction	Trained	7/7	Active	Yes				

The **FIRST_TIME_FIX_PROBABILITY** model must be trained and activated before using the feature.

The **First Time Fix Batch Prediction** database task has been introduced so that users can schedule and automatically generate FTFP scores for batches of tasks (with assignments), improving efficiency.

Solution Manager > Background Processing > Scheduled Tasks > Database Task Schedule

Database Task Schedule

Search (1)

Sort by ▾

<< Schedule - First Time Fix Batch Prediction ▾ 1 of 1

[Edit](#) [Delete](#) [Run](#) [New](#) [View Background Jobs](#)

First Time Fix Batch Prediction

Schedule ID: 584
Active: Yes
Next Execution: 6/8/25, 1:00 AM

General		
Name	Database Task	Active
First Time Fix Batch Prediction	First Time Fix Batch Prediction	Yes
Next Execution	Number of Times Executed	Scheduled By
6/8/25, 1:00 AM	0	 TISCNL

Schedule

Time Interval	Options
24	Send Stream Notification <input checked="" type="checkbox"/>

Parameters

Name	Value	Required
COMPANY_	25	Yes
SERVICE_ORGANIZATION_	2501	No
SERVICE_DELIVERY_UNIT_		No
ALLOCATED_START_IN_	24	Yes

This database task provides four key parameters:

- COMPANY (mandatory)
- SERVICE_ORGANIZATION (optional)
- SERVICE_DELIVERY_UNIT (optional)
- ALLOCATED_START_IN (mandatory) - Defines time window in hours: 0–168. For example, the maximum of 168 means that all tasks in the coming 7 days will be considered.

Visualize First Time Fix Probability (25R1★)

The First Time Fix Probability (FTFP) represents the predicted likelihood that a task will be successfully completed during the technician's first visit, based on historical service data.

Service Management > Request Management > Task Handling > Request Work Task

Request Work Task

Search (9) Advanced Search with Time Zone ⓘ

Status Task No Priority Customer FTFP More Favorites Search

5994 - HVAC Installation - MASS 1 of 9

New View Status Place Serial in Equipment Structure Dependencies (0) Edit Locat

Task Details

Task No 5994	Task Description * HVAC Installation - MASS	Created Date 1/10/25, 1:55 PM
Long Description HVAC Installation - MASS	Request 1028 - Installa...	Scope 1034
Invoicing Info GBP	Customer MC M-CUSTOMER - MASS Customer	FTFP 62.14 %

Single on-demand generation of First Time Fix Prediction allows users to manually trigger the prediction for an individual task, enabling targeted analysis or urgent evaluations outside of scheduled batch runs.

For tasks with New or Released status, --% in the FTFP field indicates the score hasn't been generated yet. Selecting --% or an already calculated score triggers the on-demand FTFP generation, opening the *First Time Fix Predictions and Possible Actions* page with the latest prediction, key factors, and recommendations.

> Service Management > Request Management > Task Handling > Request Work Task > First Time Fix Predictions and Possible Actions

First Time Fix Predictions and Possible Actions

This feature is powered by AI, so surprises and mistakes are possible.

Probability

Latest FTFP
62.14 %

Top Contribution Factors

Factor	Contribution
Activity Type	66.64 %
Task Duration	26.08 %
Resource Availability	4.85 %
Assignment Duration	1.36 %
Material Availability	0.99 %

Recommendations

Possible Action	Possible Improvement
Assign specialized technician for the activity type.	70 %
Reduce allocated task time to eliminate idle technician hours.	30 %
Ensure technician availability at scheduled time.	10 %
Allow enough time for assignment based on task complexity.	5 %
Pre-check and restock unavailable materials in advance.	2 %

Explainable AI (XAI) highlights the top five factors contributing to the First-Time Fix Prediction, showing both contribution values and visual indicators: green for positive influence and red for negative influence. The page also shows LLM-driven recommendations based on the top five factors.

Single on-demand FTFP generation can also be performed from the Dispatch Console by selecting a Task and using the **Generate FTFP Insights** button.

<< 2501 - Default Dataset ▾

Refresh User Settings Map

Resources

Name	Utilization (Today)	Resource ID	Fri, Jun 6, 2025	Sat, Jun 7, 2025
Alex Tonen	0 %	ALTONL	12 PM 4 PM 8 PM	12 AM 4 AM 8 AM
AW Contractors	0 %	AWCONL-C	12 PM 4 PM 8 PM	12 AM 4 AM 8 AM
Berry Schaars	0 %	BESCNL	12 PM 4 PM 8 PM	12 AM 4 AM 8 AM
Bregje van Dijk	0 %	BRDNL	12 PM 4 PM 8 PM	12 AM 4 AM 8 AM
Carla Beugeldijk	0 %	CABENL	12 PM 4 PM 8 PM	12 AM 4 AM 8 AM

WORK TASKS

Task No	Description	Task Address	Customer	FTFP	Has PSO Allocation	Scheduling Status	Work Assignment Status	Task Status	Has Fixed Start	Remotely Fulfilled
609	Preventive Maintenance	Joan Muyskenweg ...	NL20103 - Van Buren Hotel Amsterdam	-- %	Yes	Allocated		Released	No	No
48	Preventive Maintenance	...	NL123512 - Fam. van den Berg	-- %	No			Released	No	No
49	Preventive Maintenance	...	NL123513 - Fam. de Boer	-- %	No			Released	No	No
50	Preventive Maintenance	...	NL123514 - Fam. de Leeuw	-- %	No			Released	No	No

Assign

- Appointment Booking
- View on Map
- View Eligible Resources
- View Nearby Resources
- Additional Qualifications
- View SLA Timeline
- Request Task
- Edit Task
- Service Notes

Events

Generate FTFP Insights

Bundle Tasks

Note: Task Bundling is explained in this NGSM document, however it is also supported in ESM i.e., with Work Orders.

Concept

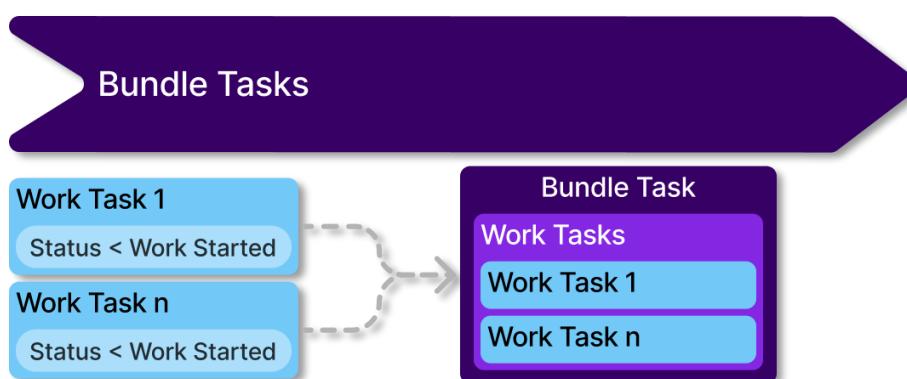
Work Tasks are planned, scheduled and executed as individual entities, and the only way of clustering or grouping similar work at the same location is by manually scheduling them together or by using location incentives in automatic scheduling. Even though a set of individual jobs are manually grouped together in the scheduling and dispatch phase, the work will still have to be reported individually which is time-consuming and frustrating for multiple short-duration Work Tasks to be performed at the same or nearby locations.

Benefits of task bundling include:

- By providing the ability to group multiple Work Tasks into a Bundle Task, multiple tasks can be both scheduled and executed as one piece of work, saving time and effort both for Dispatchers and Field Technicians, while still respecting the constraints and planned duration of each individual task.
- Status automation ensures that individual Work Tasks are updated appropriately even when bundled into one executable Bundle Task.
- Time and material reporting is automatically distributed according to planning on each individual task, ensuring that time sheets, invoices and stock is properly managed.

When bundling tasks,

- multiple tasks are added into a new Bundle Task,
- the bundle duration is automatically calculated based on included tasks,
- duration and other time constraints can be altered,
- a location and address for the bundle can be specified.



When planning a task bundle,

- Resource Demands for the bundle are added manually,
- additional work tasks can be added after creation,
- assignments are created for the bundle.

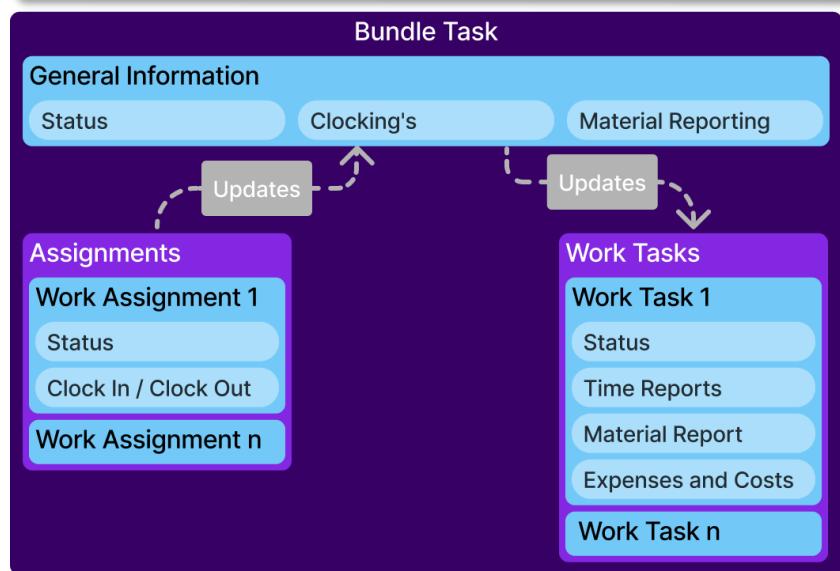
Planning



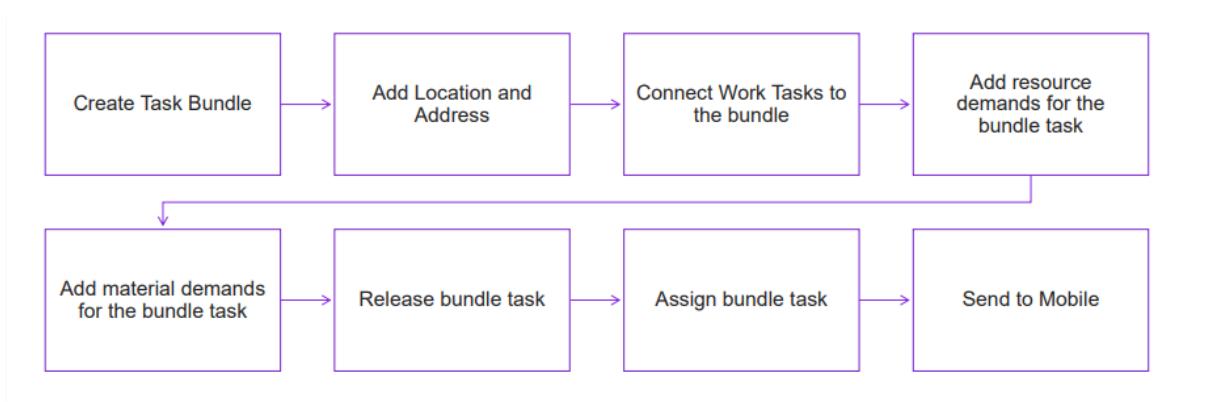
When executing a task bundle,

- assignments affect the Task Bundle that in turn affects each individual Work Task,
- an assignment status change affects the bundle that affects the Work Tasks,
- clockings and time reports created are distributed to the individual tasks,
- material consumption is pushed to the individual task.

Execute and Report

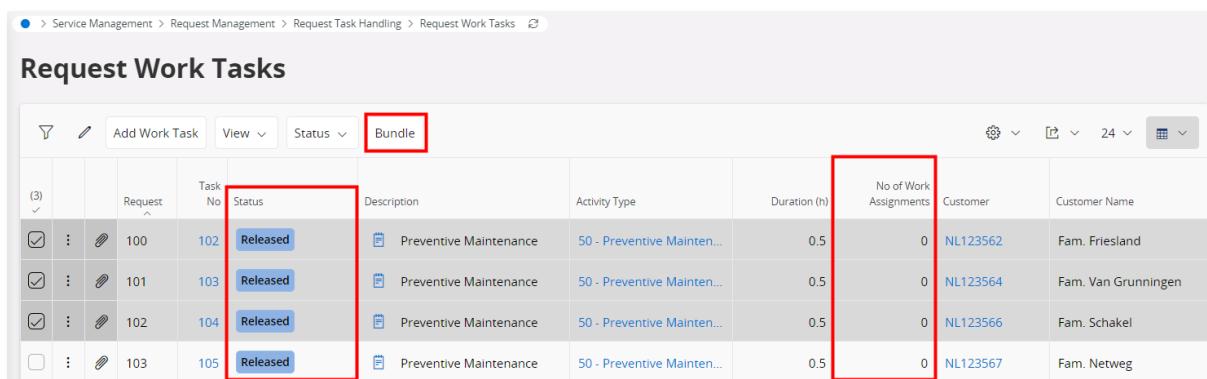


The general flow of a Bundle Task from creation to arrival in the Mobile App looks like this.



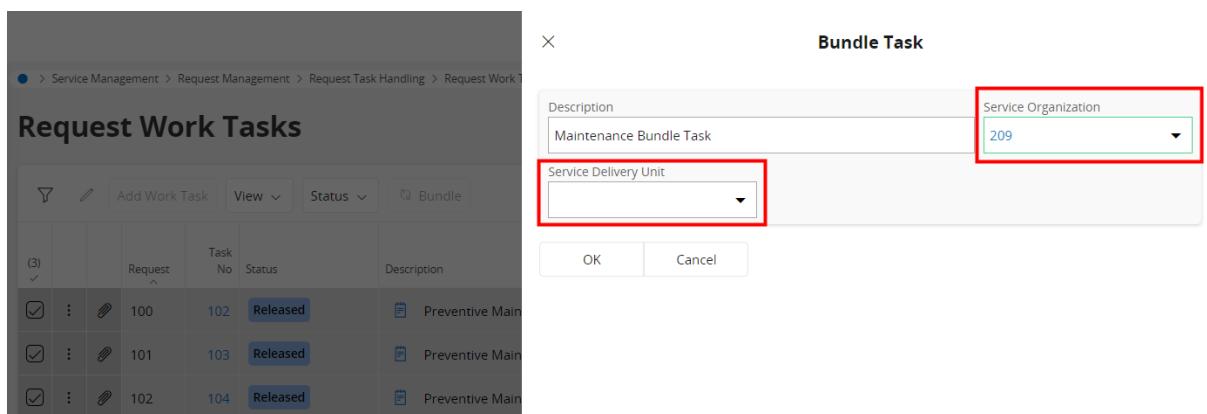
Create a Bundle Task (25R1)

A bundle task is created from the list of request tasks i.e.,  Service Management>Request Management>Request Task Handling>Request Work Tasks. The **Bundle** command is only available when all selected tasks have a status earlier than Work Started, there must not be any Active Work Assignments.



(3) ✓	Request	Task No	Status	Description	Activity Type	Duration (h)	No of Work Assignments	Customer	Customer Name	
<input checked="" type="checkbox"/>		100	102		Preventive Maintenance	50 - Preventive Mainten...	0.5	0	NL123562	Fam. Friesland
<input checked="" type="checkbox"/>		101	103		Preventive Maintenance	50 - Preventive Mainten...	0.5	0	NL123564	Fam. Van Grunningen
<input checked="" type="checkbox"/>		102	104		Preventive Maintenance	50 - Preventive Mainten...	0.5	0	NL123566	Fam. Schakel
<input type="checkbox"/>		103	105		Preventive Maintenance	50 - Preventive Mainten...	0.5	0	NL123567	Fam. Netweg

The Bundle Task Information panel allows to specify a description, the owning Service Organization and (optionally) Service Delivery Unit.



The newly created bundle task is available at  Service Management>Request Management>Request Task Handling>Request Bundle Task.

Request Bundle Task 296 - Maintenance Bundle Task ▾ 1 of 1

New

Status Transfer To Mobile Edit Location Assign Work Unbundle Access Control

General Information	Location and Address																																				
Bundle Task No. 296 Description Maintenance Bundle Task	Location																																				
Long Description	Address																																				
Transferred to Mobile No																																					
	Open Map																																				
Handling Information																																					
Service Organization 209 - VenTechi Netherlands	Service Delivery Unit 209 - VenTechi Netherlands																																				
Scheduling Dataset Priority Activity Type																																					
Task Dates																																					
SLA Commitments No Active Commitments	Duration (h) 1.5																																				
Fixed Start	Planned Start 4/24/24, 8:00 AM																																				
	Planned Finish																																				
	Actual Start																																				
	Actual Finish																																				
WORK TASKS RESOURCES ASSIGNMENTS SLA SCHEDULING INFO SUMMARY																																					
<table border="1"> <thead> <tr> <th>Task No.</th> <th>Description</th> <th>Status</th> <th>Duration (h)</th> <th>Planned Start</th> <th>Planned Finish</th> <th>Service Organization</th> <th>Service Delivery Unit</th> <th>Customer</th> </tr> </thead> <tbody> <tr> <td>102</td> <td>Preventive Maintenance</td> <td>Releasable</td> <td>0.5</td> <td>4/24/24, 8:00 AM</td> <td>4/24/24, 8:30 AM</td> <td>209</td> <td></td> <td>FF NL123562 - Fam. F...</td> </tr> <tr> <td>103</td> <td>Preventive Maintenance</td> <td>Releasable</td> <td>0.5</td> <td>4/24/24, 8:00 AM</td> <td>4/24/24, 8:30 AM</td> <td>209</td> <td></td> <td>PV NL123564 - Fam. V...</td> </tr> <tr> <td>104</td> <td>Preventive Maintenance</td> <td>Releasable</td> <td>0.5</td> <td>4/24/24, 8:00 AM</td> <td>4/24/24, 8:30 AM</td> <td>209</td> <td></td> <td>FS NL123566 - Fam. S...</td> </tr> </tbody> </table>		Task No.	Description	Status	Duration (h)	Planned Start	Planned Finish	Service Organization	Service Delivery Unit	Customer	102	Preventive Maintenance	Releasable	0.5	4/24/24, 8:00 AM	4/24/24, 8:30 AM	209		FF NL123562 - Fam. F...	103	Preventive Maintenance	Releasable	0.5	4/24/24, 8:00 AM	4/24/24, 8:30 AM	209		PV NL123564 - Fam. V...	104	Preventive Maintenance	Releasable	0.5	4/24/24, 8:00 AM	4/24/24, 8:30 AM	209		FS NL123566 - Fam. S...
Task No.	Description	Status	Duration (h)	Planned Start	Planned Finish	Service Organization	Service Delivery Unit	Customer																													
102	Preventive Maintenance	Releasable	0.5	4/24/24, 8:00 AM	4/24/24, 8:30 AM	209		FF NL123562 - Fam. F...																													
103	Preventive Maintenance	Releasable	0.5	4/24/24, 8:00 AM	4/24/24, 8:30 AM	209		PV NL123564 - Fam. V...																													
104	Preventive Maintenance	Releasable	0.5	4/24/24, 8:00 AM	4/24/24, 8:30 AM	209		FS NL123566 - Fam. S...																													

User Access Groups are copied from the included Work Tasks to the Bundle Task and can be modified using the Access Control Assistant. At least one Access Group is required.

The **Scheduling Dataset** is inherited from the Service Organization/Service Delivery Unit specified earlier.

Duration (h) is calculated as the sum of duration of the individual tasks. Additional tasks can be added on the *Work Tasks* tab, which will recalculate the bundle task duration.

Note: Even if all tasks are associated to the same location, the location of the bundle task needs to be specified manually using the **Address** button.

Appointment Required indicates that this bundle needs to be appointment-booked.

The *Scheduling Info* tab can be used to provide various scheduling-related attributes such as availabilities and resource preferences.

[WORK TASKS](#) [RESOURCES](#) [ASSIGNMENTS](#) [SLA](#) [SCHEDULING INFO](#) [SUMMARY](#)

Scheduling Constraints

Exclude From Scheduling Adjust Duration Duration Override Allow Multiple Visits Interrupt

Appointment Booking

Scheduling SLA Types

Allocations

...

Availability Patterns

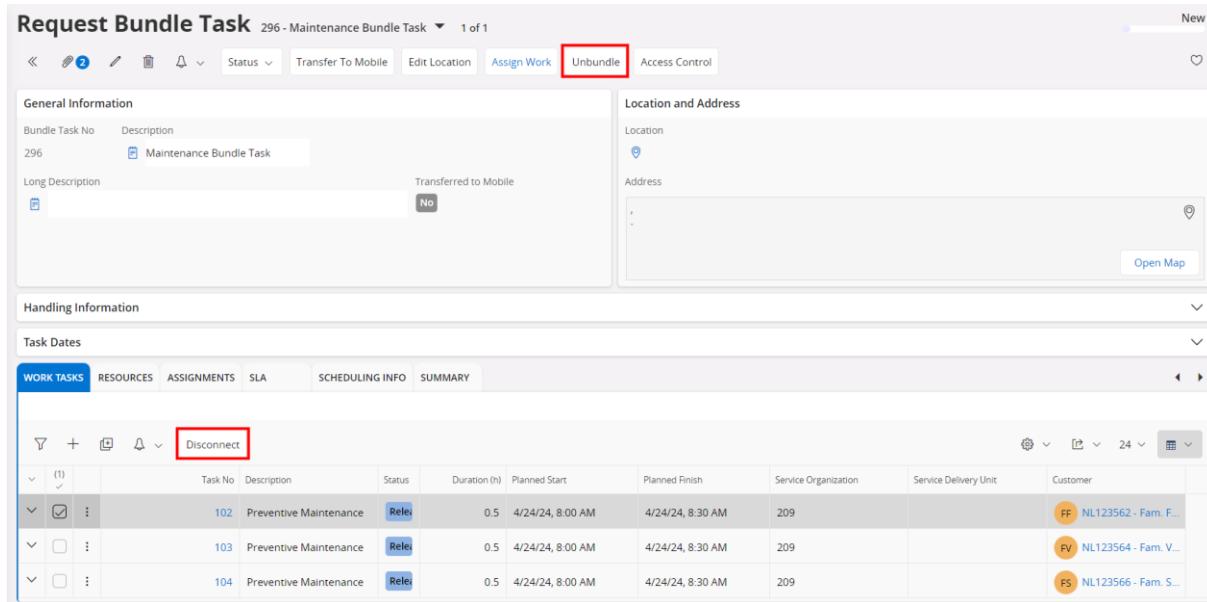
+

Location

Displacement Priority

Preference

Unbundle removes the individual tasks from the bundle and cancels the bundle itself.



The screenshot shows the 'Request Bundle Task' interface for a 'Maintenance Bundle Task'. The 'Unbundle' button in the top navigation bar is highlighted with a red box. The main area displays 'General Information' (Bundle Task No: 296, Description: Maintenance Bundle Task), 'Location and Address' (Location: Maintenance, Address: -), and a 'Handling Information' section. Below these are 'Task Dates' and a detailed 'WORK TASKS' grid. The 'Disconnect' button in the 'WORK TASKS' grid is also highlighted with a red box. The grid lists three tasks: Task No 102 (Preventive Maintenance), Task No 103 (Preventive Maintenance), and Task No 104 (Preventive Maintenance). Each task has a status of 'Released' and a duration of 0.5 hours, scheduled for April 24, 2024, at 8:00 AM. The 'Customer' column shows three entries: NL123562 - Fam. F..., NL123564 - Fam. V..., and NL123566 - Fam. S... Each entry is preceded by a small orange circle containing a letter (FF, FV, FS).

Disconnect removes a task from a bundle. As soon as time was reported against the bundle, disconnect is no longer possible.

Bundle Tasks support the following statuses.

Status	Description
New	Initial status when Bundle Task is created
Under Preparation	Preparations started
Prepared	Bundle Task content and requirements prepared
Released	Bundle Task is ready to be scheduled/started
Work Started	Work was started
Work Done	Required work is done
Reported	All transactions related Bundle Task work have been reported
Finished	All required work and reporting finished
Cancelled	Bundle Task was cancelled

SLAs on Bundle Tasks

Please refer to SLA Management/[SLAs on Bundle Tasks](#).

Schedule a Bundle Task

Resource demands are not carried over from the individual tasks, they need to be specified explicitly.

SUMMARY WORK TASKS **RESOURCES** ASSIGNMENTS

Demand

Demand Line No	Demand Type	Resource Group	Resource	Planned Quantity	Cost	Overhead Cost	Cost Amount	Plan Line ID	Sourcing Option	Time Type	Sales Part Site	Sales Part	Revenue %
(No data)													

Bundle Tasks can be scheduled like Request Tasks and will be indicated by a different icon.

Resources

2024: Fri, April 26, 2024

Name	Utilizat	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM
Alex Tonen	17.6%												
Berry Schaars	0 %												
Bregje van Dijk	0 %												
Carla Beugeldijk	0 %												
Edgar Storm	0 %												

WORK TASKS

Task No	Description	Task Address	Wo No	Actual Object	Serial No	Scheduling Status	Customer
296	Maintenance Bundle Ta...	Plaswiedeweg 61, Wenum-Wiesel, 7345 DE, NL, NETHERLAND...				Assigned	

Work Assignment (Task No - 296)

Task Description: Maintenance Bundle Task

Work Type

Task Status: Released

Allocation Start: 4/26/24, 1:00 PM

Allocation Finish: 4/26/24, 2:30 PM

Allocated Hours: 1.5

Assignment No: 1

Visit ID: 1

Task Dependencies: No

Date Constraints Violated: No

Plaswiedeweg 61
Wenum-Wiesel,
7345 DE
NL -

Open Map

When the task bundle was released, it is possible to report time, issue materials, and execute returns.

Request Bundle Task 296 - Maintenance Bundle Task 1 of 1

Reporting ▾ Status Transfer To Mobile Edit Location Assign Work Unbundle Issue (9) Return to Inventory (0) Access Control Released

General Information

Bundle Task No	Description	Location
296	Maintenance Bundle Task	Plaswiedeweg 61 Wenum-Wiesel, 7345 DE NL -
Long Description	Transferred to Mobile	Open Map
No		

Location and Address

Handling Information

Service Organization	Service Delivery Unit	Scheduling Dataset	Priority	Activity Type
209 - Ventechi Netherlands		209 - Ventechi Netherlands		

Task Dates

SLA Commitments	Duration (h)	Planned Start	Planned Finish
No Active Commitments	1.5	4/24/24, 8:00 AM	
Fixed Start	Actual Start	Actual Finish	

WORK TASKS RESOURCES ASSIGNMENTS SLA SCHEDULING INFO SUMMARY

Demand Line No	Demand Type	Resource Group	Planned Quantity	Cost	Overhead Cost	Cost Amount	Plan Line ID	Sourcing Option	Time Type	Sales Part Site	Sales Part	Revenue %	Markup %	Unit Sales Price/Base
(1)	1 Person	WFM - Field Workf...	1	0.00	0.00	0.00	1162	Internally Sourced	209			0		

Report Time

With Bundle Task Cost Distribution=Equal, the reported time will be evenly distributed among all associated tasks.

X Report Time

Report Time	Employee ID	Employment Company	Hours	Time Type
Resource ID ALTONL	ALTONL	VSEU	1.5	
Transaction Date 12/21/23, 2:33 PM	Resource Group 20.30 - Field Workforce	Maint Org Site 20	Maint Org 20 - Ventechi Netherla...	Bundle Task Cost Distribution Equal
Comment <input type="text"/>				

With Bundle Task Cost Distribution=**Percentage**, time will be distributed among the tasks based on their share of the total duration. Here's an example. The bundle task containing the tasks below has a planned duration of 4 hours. When reporting an actual duration of 5 hours, these 5 hours will be split in the following way:

Task #	Planned Time (i.e., duration)	Reported Time
Task 1	1.5	$1.5 \times (5 / 4) = 1.875$
Task 2	2.0	$2.0 \times (5 / 4) = 2.5$
Task 3	0.5	$0.5 \times (5 / 4) = 0.625$

With Bundle Task Cost Distribution=**Manual**, times are manually captured per task.

X Report Time

Report Time	Employee ID	Employment Company	Hours	Time Type
Resource ID ALTONL	ALTONL	VSEU		
Transaction Date 12/21/23, 2:49 PM	Resource Group 20.30 - Field Workforce	Maint Org Site 20	Maint Org 20 - Ventechi Netherlands	Bundle Task Cost Distribution Manual
Comment <input type="text"/>				

Source Information

ToolEquipment

Manual Time Reporting for Bundled Tasks

Task No.	Hours	Description	Duration	Planned Start	Planned Finish	Site	Status
5	0.5	Inspection	0.5			20	Released
202	1.5	Inspection	1.5			20	Released
203	2.5	Inspection	2			20	Released

Done Cancel Edit OK Cancel

The default value for Bundle Task Cost Distribution can be defined using the Object Property **BND_TASK_COST_DIST** maintained at Application Base Setup>System Setup>System Definitions>Object Properties.

Application Base Setup > System Setup > System Definitions > Object Properties

Object Properties

Object LU	Object Key	Property Name	Property Value	Validations Enabled	Validation Method	Restricted
MaintenanceConfiguration	*	BND_TASK_COST_DIST	MANUAL	Yes	Maintenance_Configuration_API.Validate_Parameter	No

Report Manual Transaction/Expenses

Using Report Manual Transactions, additional expenses or external cost can be reported.

Report Manual Transaction

Task No	Task Description	Bundle Task Cost Distribution																																										
296	Maintenance Bundle ...	Manual																																										
Report Manual Transaction																																												
Transaction Type	Planned Line ID	Quantity/Unit	Unit Code	Cost																																								
Expenses			pcs																																									
Total Cost	Cost Category	Transaction Date	4/26/24, 12:00 PM																																									
Comment																																												
Manual Cost Reporting for Bundled Tasks																																												
<table border="1"> <thead> <tr> <th>✓</th> <th>Task No</th> <th>Description</th> <th>Quantity/Unit</th> <th>Unit Code</th> <th>Cost</th> <th>Total Cost</th> <th>Cost Category</th> <th>Transaction Date</th> <th>Comment</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/></td> <td>102</td> <td>Preventive Maintenance</td> <td></td> <td>pcs</td> <td></td> <td></td> <td></td> <td>4/26/24, 12:00 PM</td> <td></td> </tr> <tr> <td><input type="checkbox"/></td> <td>103</td> <td>Preventive Maintenance</td> <td></td> <td>pcs</td> <td></td> <td></td> <td></td> <td>4/26/24, 12:00 PM</td> <td></td> </tr> <tr> <td><input type="checkbox"/></td> <td>104</td> <td>Preventive Maintenance</td> <td></td> <td>pcs</td> <td></td> <td></td> <td></td> <td>4/26/24, 12:00 PM</td> <td></td> </tr> </tbody> </table>					✓	Task No	Description	Quantity/Unit	Unit Code	Cost	Total Cost	Cost Category	Transaction Date	Comment	<input type="checkbox"/>	102	Preventive Maintenance		pcs				4/26/24, 12:00 PM		<input type="checkbox"/>	103	Preventive Maintenance		pcs				4/26/24, 12:00 PM		<input type="checkbox"/>	104	Preventive Maintenance		pcs				4/26/24, 12:00 PM	
✓	Task No	Description	Quantity/Unit	Unit Code	Cost	Total Cost	Cost Category	Transaction Date	Comment																																			
<input type="checkbox"/>	102	Preventive Maintenance		pcs				4/26/24, 12:00 PM																																				
<input type="checkbox"/>	103	Preventive Maintenance		pcs				4/26/24, 12:00 PM																																				
<input type="checkbox"/>	104	Preventive Maintenance		pcs				4/26/24, 12:00 PM																																				

As with Time Reports, the Cost Distribution can be specified as Manual, Equal, or Percentage.

Expense Sheets may be linked to Bundle Tasks.

New Expense Sheet

General Information — Travel Details

10105 - Tina Scheers

Expense Type and Dates

General Expense
 Domestic Travel Expense
 Abroad Travel Expense

Expense Date

Purpose and Information

Connected To

Organization: 31 - HR Business Partners | Expense Rule: VER - Ventechi Expense Rule

Show Project List:

Project Activity:

Customer Company:

Customer Project Activity:

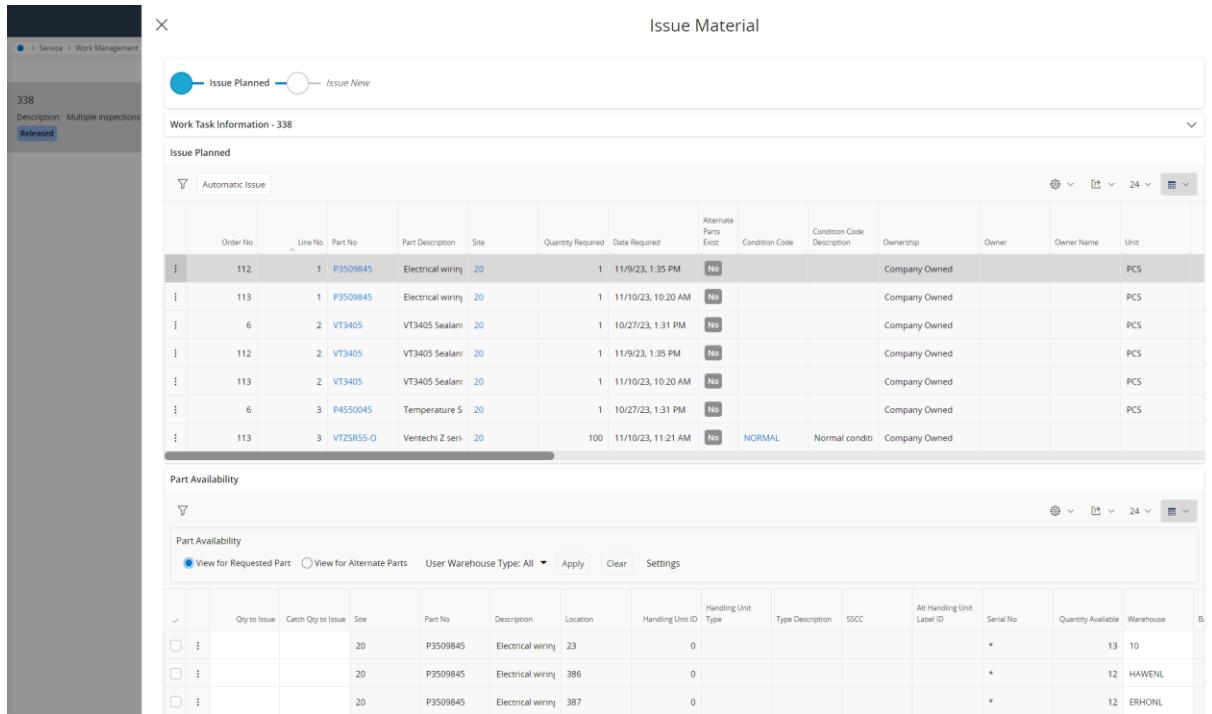
Work Order:

Work Task: **296 - Maintenance Bundle Task**

Previous | Next | Create Expense Sheet | Cancel

Issue Material

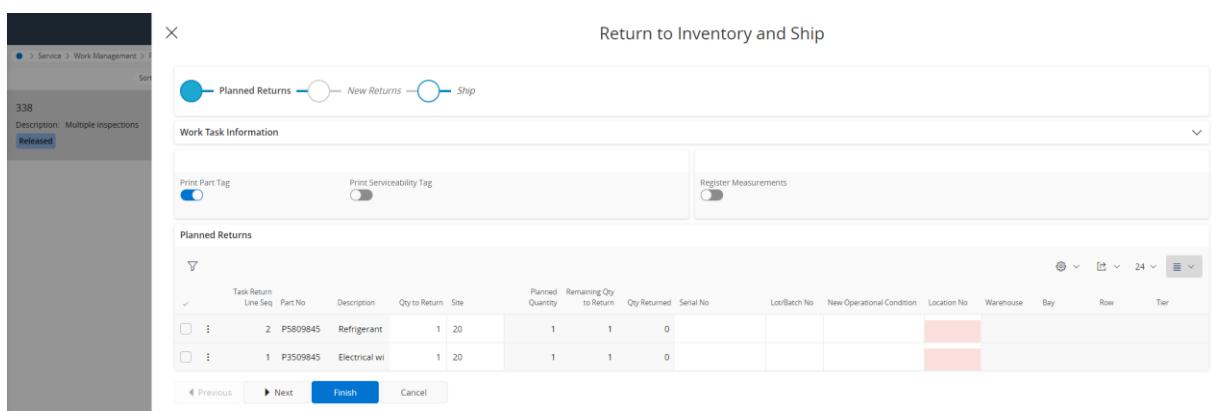
Material Requirements defined on the individual work tasks can be issued through the Bundle Task using **Issue**.



The screenshot shows the 'Issue Material' bundle task interface. At the top, there are two buttons: 'Issue Planned' (blue circle) and 'Issue New' (grey circle). Below this is a section titled 'Work Task Information - 338' with a status of 'Released'. The main area is titled 'Issue Planned' and contains a table with the following columns: Order No, Line No, Part No, Part Description, Site, Quantity Required, Date Required, Alternate Parts Exist, Condition Code, Condition Description, Ownership, Owner, Owner Name, and Unit. The table lists several work tasks, each with multiple parts. For example, Work Task 112 has three parts: P3509845, VT3405, and P4550045. Work Task 113 has two parts: P3509845 and VT25RS5-O. Work Task 6 has one part: VT3405. Work Task 112 also has a row for a Venitech Z series part. Below this is a 'Part Availability' section with a table showing part details like Part No, Description, Location, Handling Unit ID, Handling Unit Type, Type Description, SCCC, Alt Handling Unit Label ID, Serial No, Quantity Available, and Warehouse.

Return to Inventory

Returns defined on the individual work tasks can be executed through the Bundle Task using **Return to Inventory**.



The screenshot shows the 'Return to Inventory and Ship' bundle task interface. At the top, there are three buttons: 'Planned Returns' (blue circle), 'New Returns' (grey circle), and 'Ship' (blue circle). Below this is a section titled 'Work Task Information' with buttons for 'Print Part Tag' (on), 'Print Serviceability Tag' (off), and 'Register Measurements' (off). The main area is titled 'Planned Returns' and contains a table with the following columns: Task Return Line Seq, Part No, Description, Qty to Return, Site, Planned Quantity, Remaining Qty to Return, Qty Returned, Serial No, Loc/Batch No, New Operational Condition, Location No, Warehouse, Bay, Row, and Tier. The table lists two items: a refrigerant return (Line Seq 2) and an electrical wire return (Line Seq 1).

Bundle Tasks in MWO

Once the bundle task is ready for execution, **Transfer to Mobile** sends it to MWO, where it is available in both *My Work* and *My Work Calendar*.

SORT BY ▾

Bundle Task 338 - Multiple inspections ▾ 1 of 1

Report Time Status ▾ **Transfer To Mobile** Address Assign Work Issue (8) Return to Inventory (2)

Released

General Information

Bundle Task No	Description	Maint. Org Site
338	Multiple inspections	20 - Ventechi Netherlands
Maint. Org	Duration	Planned Start
20 - Ventechi Netherlands	5	
Planned Finish		
Transferred to Mobile		
No		

SUMMARY WORK TASKS RESOURCES **ASSIGNMENTS**

Allocated To	Resource Description	Status	Maint. Org Site	Maint. Org	Object Site	Object ID	Transferred To Mobile	Object Description	Maintenance Strategy	Equipment Classification	Safety	Environmental	Critical
ALTONL	Alex Tonen	Assigned	20	20			No						No

For details, please refer to [MWO Demystified](#).

Request Contracts

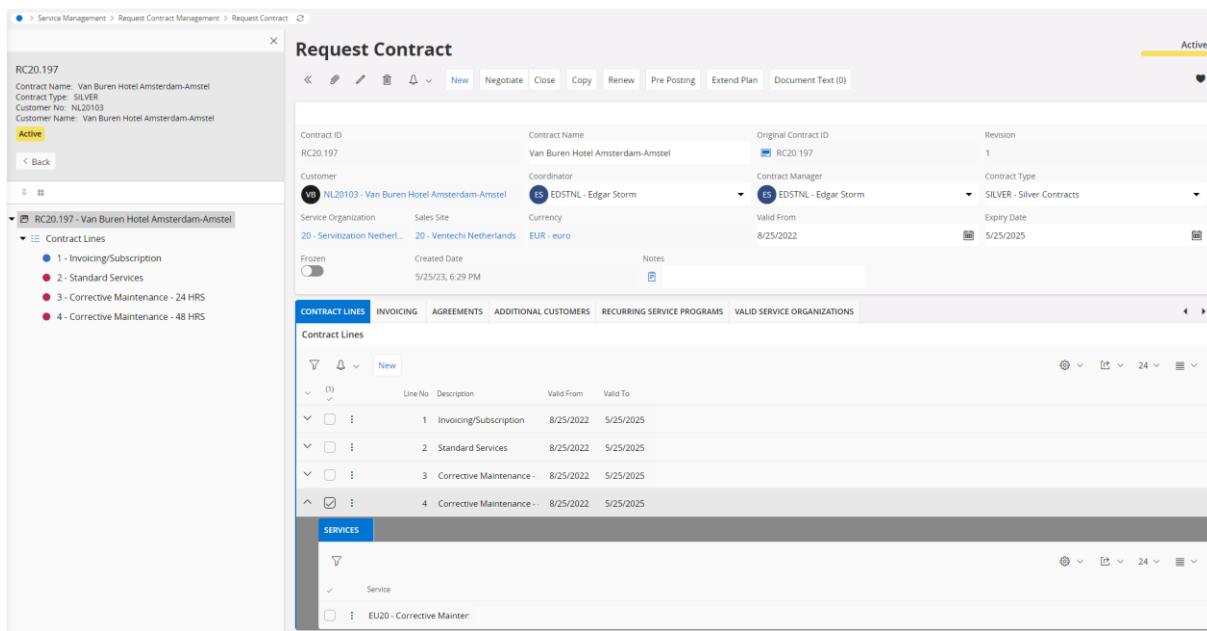
Request Contract

 Service Management>Request Contract Management> Request Contracts

The Request Contract is the commercial agreement with a customer and specifies:

- Services (taken from the service catalog) and coverage (i.e., equipment)
- Contract pricing
- Invoicing details
- Benefits
- Renewals
- Preventative maintenance agreements

In contrast to Service Contracts, coverage for a contract line can be defined for models. When a model coverage line is defined, all service objects associated with the model are covered. A request can also be initiated for a model or a service object.



Attributes include:

- **Contract Name**
- **Contract Manager**
- **Contract ID:** The identity of the request contract. You may enter a value or leave the field empty in which case the system will assign an auto-numbering ID starting with 1.
- **Customer:** Primary/single customer on the contract. *Additional Customers* (page tab) can be listed if, for example, different departments within a company are defined as separate customers but should still be allowed to use the same contract. This means that the additional customers can be used on Requests using the same Contract. The customers entered here can also be used as Alternative Customers to whom the contract can be invoiced, if required.

- **Currency:** Uses the customer's preferred currency by default. Can be changed during the creation but only until the record is saved, after that it cannot be modified.
- **Contract Coordinator:** Maintained at *Application Base Setup>General Data>Coordinators*.
- **Contract Type:** Used for grouping, filtering, and reporting.
- **Service Organization:** Owning organization of the Request Contract. Sales site will be fetched from the Service Organization. Service Organizations which have same Sales Site will be listed under **Valid Service Organization**.
- **Valid From:** Start date of the contract. This is mandatory and is used by the Invoice Plan. The invoice plan will request to start at the start date. Users can select the end date but cannot go past the contract's end date.
- **Expiry Date:** Contract end date, can be left empty for rolling contracts. New contract lines that do not have an expiry date receive this expiry date. When this value is updated or removed, contract lines with the same value are updated/removed automatically. The expiry date on the header must always be the same or after the expiry dates on the contract lines.
- **Frozen:** Select this check box if you need to temporarily freeze the contract due to reasons such as if a customer fails to make a payment. It is not possible to connect a contract line from a frozen contract to a request. However, a frozen contract can be invoiced.

Request Contract Statuses

A contract can have one of these statuses:

- **Planned** – Default status of a new contract. A planned contract cannot be used with requests.
- **Active** – An active contract is ready to be connected to a request or to be invoiced.
- **Negotiated** – The status of a contract is set to Negotiated when an active contract needs to be adjusted.
- **Closed** – A closed contract is no longer in use.

Price Rules

 *Service Management>Basic Data>Contract and Agreement Basic Data>Price and Cost Rule>Price Rule*

Every request contract can contain 1..n contract lines and each line references one pricing rule that defines how services on that contract line are priced.

Service Management > Request Management > Basic Data > Price Rule > Price Rule

Price Rule 20 - Cost-Based Pricing

	Rule ID	Description
0	20	Cost-Based Pricing
10		Premium Pricing
20		Cost-Based Pricing
40		Labor Covered
70		Premium Plus Pricing
30		Parts Covered
50		Part & Labor Covered
60		25% Discount

Price Rule Lines:

Type	Sales Group	Cost Type	Include in Fixed Price	Sales Part for Fixed Price	Revenue %	Cost Based Pricing	Markup %	Invoice Zero Amounts
Sales Group	SERVICE - SERVICE	No	No		40	No	Yes	
Cost Type		Material	No		45	No	Yes	
Cost Type		Personnel	No		55	Yes	100	Yes
Cost Type		External	No		66	No	Yes	
Cost Type		Expenses	No		77	No	Yes	
Cost Type		Tool/Equipment	No		88	Yes	21	Yes
All Other			No		100	No	Yes	

A price rules contains 1..n price rule lines with these attributes:

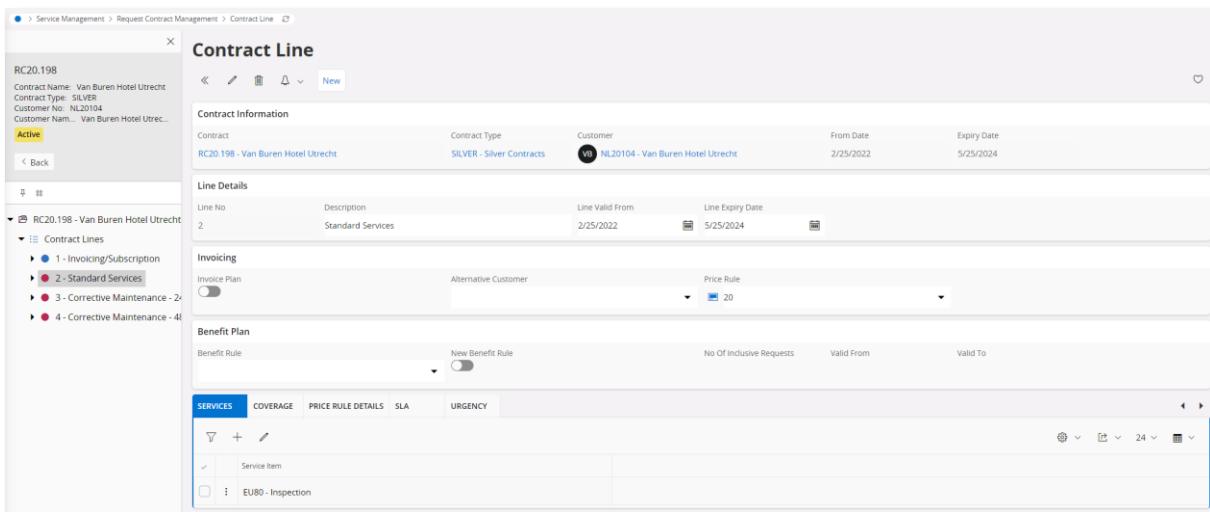
Attribute	Explanation
Type	Rule lines can apply to Sales Groups (i.e., to define pricing of a group of products), Cost Type (e.g., to define price rules for T&M), or All Other , which acts as a default for items not covered by any of the other lines.
Sales Group	When Type=Sales Group, apply the price rule line to the selected Sales Group (defined in <i>Sales>Basic Data</i>) i.e., all sales parts in that group. For an example see Auxiliary Material Free of Charge, Material Discounted .
Cost Type	When Type=Cost Type, apply the price rule line to all cost transactions with this cost type. The available cost types are: Personnel - resource transactions e.g., time reports Material - for material actions such as part usage or returns External - external costs e.g., a supplier invoice Expenses - expense records related to the work Tool/Equipment - transactions related to tools and equipment. For an example see Labor Based on List Price, Material for Free .
Include in Fixed Price	Indicates that the matching lines will be accumulated to a planning line with cost type Fixed Price using the Sales Part for Fixed Price . For an example see Fixed Price for the Entire Service .
Sales Part for Fixed Price	A part from the part catalog to use as the sales part of the fixed price line. For an example see Fixed Price for the Entire Service .
Revenue %	Defines the percentage of the standard price that should be invoiced to the customer. If Revenue % = 90, the customer pays 90% i.e., is given a 10% discount. For an example see Auxiliary Material Free of Charge, Material Discounted .
Cost Based Pricing	Yes - calculate the price as a markup on the cost. For an example see Labor Based on Cost, Material Using List Price .

Attribute	Explanation
	No – calculate the price based on the sales price. For an example see Auxiliary Material Free of Charge, Material Discounted .
Markup %	Used for Cost Based Pricing. $Sales\ Price = Cost + (Cost \times Markup\ %)$
Invoice Zero Amounts	Controls whether to include sales lines with sales amount zero on the customer invoice.

Once the rule has been defined, it can be used on a contract line.

Contract Lines

Contract lines define different contractual obligations – services and service objects/models covered, SLA, available urgencies, and pricing/invoicing details.



The screenshot shows the 'Contract Line' screen in the IFS application. At the top, there's a breadcrumb navigation: Service Management > Request Contract Management > Contract Line. The main title is 'Contract Line'. Below the title, there's a summary section for 'RC20.198' with fields for Contract Name, Contract Type (SILVER), Customer No., and Customer Name. A 'New' button is also present. The main content area is divided into several sections: 'Contract Information' (Contract: RC20.198 - Van Buren Hotel Utrecht, Contract Type: SILVER - Silver Contracts, Customer: NL20104 - Van Buren Hotel Utrecht, From Date: 2/25/2022, Expiry Date: 5/25/2024); 'Line Details' (Line No: 2, Description: Standard Services, Line Valid From: 2/25/2022, Line Expiry Date: 5/25/2024); 'Invoicing' (Invoice Plan: Off, Alternative Customer: None, Price Rule: 20); 'Benefit Plan' (Benefit Rule: Off, New Benefit Rule: Off, No Of Inclusive Requests: 20, Valid From: 2/25/2022, Valid To: 5/25/2024); and a 'SERVICES' tabbed section at the bottom containing 'COVERAGE', 'PRICE RULE DETAILS', 'SLA', and 'URGENCY'. Under the SERVICES tab, there are lists for 'Service Item' (EU80 - Inspection) and 'Coverage' (EU80 - Inspection). On the left side, there's a sidebar with a tree view showing 'RC20.198 - Van Buren Hotel Utrecht' and 'Contract Lines' with items 1-4 listed.

Every contract line has a validity date range that needs to be within the date range of the contract. Invoice plans are used when a recurring (e.g., monthly) invoice should be created instead of individual invoices per request. Price rules determine the invoicing of individual lines such as T&M. See also [Contract Line Examples](#) below. Benefit rules can be used to define an inclusive number of requests.

Services – List the service covered by this contract line e.g., corrective maintenance, preventative maintenance, inspection.

Coverage – Lists the models or individual objects covered by the contract line. Standard services may be available for all models, but there may be emergency services for critical objects. It's also possible to cover an entire object hierarchy. By enabling option “Include Objects Added to Structure”, object that are installed as children to the object defined on the coverage line will be automatically covered by the contract line.

Price Rule Details – A read-only list of the price rule lines defined in the selected price rule.

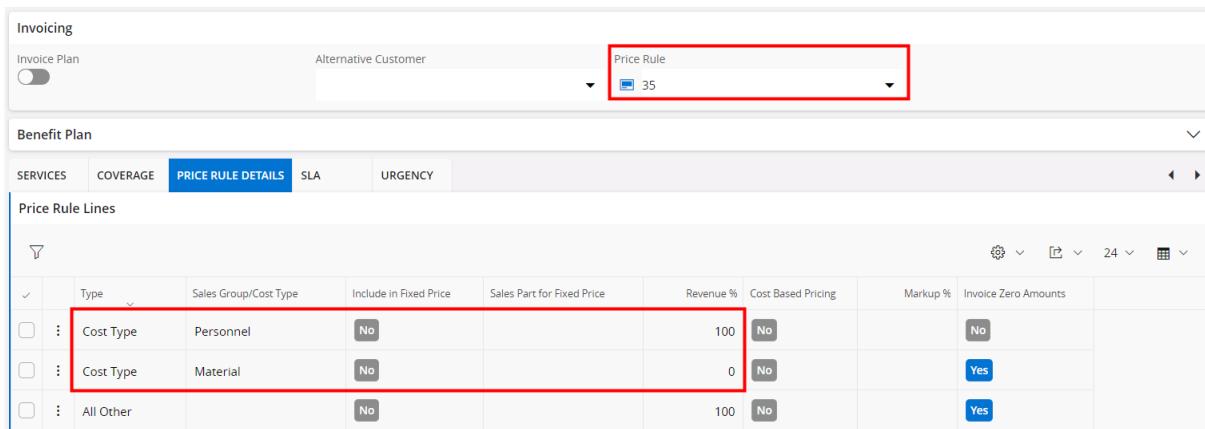
SLA – The standard SLA when using this contract line. For details see [SLA Management](#).

Urgencies - Allow the customer to request a non-standard urgency during Request creation. During Request creation using the contract line it is possible to select one of the listed urgencies. This will overwrite the standard price rule (e.g., to put a markup onto certain sales parts) and the SLA.

Contract Line Examples

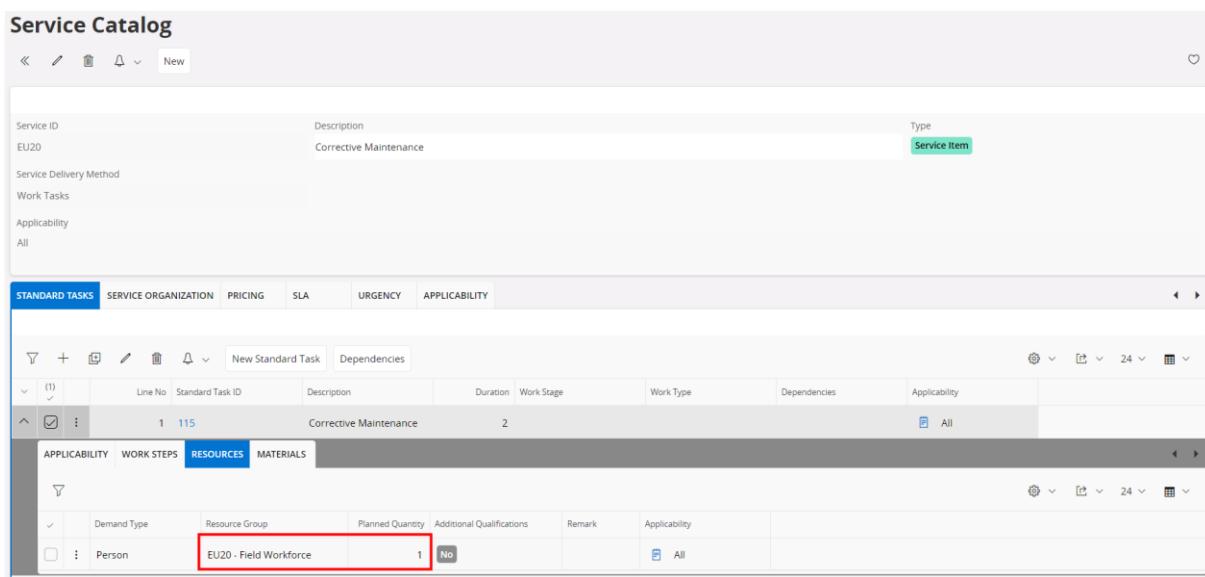
Labor Based on List Price, Material for Free

The selected price rule specifies that all cost with Cost Type=Personnel (i.e., labor) will be invoiced at list price (100%). Material will be invoiced at 0%, but still shows up on the invoice.



Type	Sales Group/Cost Type	Include in Fixed Price	Revenue %	Cost Based Pricing	Markup %	Invoice Zero Amounts
Cost Type	Personnel	No	100	No	No	
Cost Type	Material	No	0	No	Yes	
All Other		No	100	No	Yes	

Labor demand ("EU20") is defined on the Service Catalog>Standard Service>Resource Demand:



Demand Type	Resource Group	Planned Quantity	Additional Qualifications	Remark	Applicability
Person	EU20 - Field Workforce	1	No		All

Labor price for the resource group EU20 is specified on the resource and can differ per site:

Resource Details

GENERAL	RESOURCE GROUPS	CONNECTIONS	PERSONS	CAPACITY BASIS	GENERAL COST	PROJECT RELATED COST	Maintenance/Service	ATTRIBUTES	REQUIREMENTS	QUALIFICATION																		
EU20																												
Sales Part																												
<table border="1"> <thead> <tr> <th>Site</th> <th>Sales Part</th> <th>Description</th> <th>Sales Price</th> <th>Currency</th> <th>Default Sales Part</th> </tr> </thead> <tbody> <tr> <td>10</td> <td>10.01</td> <td>Normal Time</td> <td>100</td> <td>EUR</td> <td><input type="button" value="Edit"/></td> </tr> <tr> <td>20</td> <td>20.01</td> <td>Normal Time</td> <td>145</td> <td>EUR</td> <td><input type="button" value="Edit"/></td> </tr> </tbody> </table>											Site	Sales Part	Description	Sales Price	Currency	Default Sales Part	10	10.01	Normal Time	100	EUR	<input type="button" value="Edit"/>	20	20.01	Normal Time	145	EUR	<input type="button" value="Edit"/>
Site	Sales Part	Description	Sales Price	Currency	Default Sales Part																							
10	10.01	Normal Time	100	EUR	<input type="button" value="Edit"/>																							
20	20.01	Normal Time	145	EUR	<input type="button" value="Edit"/>																							

The example uses site 20, hence the list price is €145.00.

Material demand is defined at Service Catalog>Standard Service>Material:

Service Catalog

STANDARD TASKS	SERVICE ORGANIZATION	PRICING	SLA	URGENCY	APPLICABILITY															
1 115	Corrective Maintenance																			
<table border="1"> <thead> <tr> <th>Part</th> <th>Condition Code</th> <th>Planned Quantity</th> <th>Remark</th> <th>Applicability</th> </tr> </thead> <tbody> <tr> <td>P3509845 - Electrical wiring box</td> <td></td> <td>1</td> <td></td> <td>All</td> </tr> <tr> <td>VT3405 - VT3405 Sealant</td> <td></td> <td>1</td> <td></td> <td>All</td> </tr> </tbody> </table>						Part	Condition Code	Planned Quantity	Remark	Applicability	P3509845 - Electrical wiring box		1		All	VT3405 - VT3405 Sealant		1		All
Part	Condition Code	Planned Quantity	Remark	Applicability																
P3509845 - Electrical wiring box		1		All																
VT3405 - VT3405 Sealant		1		All																

Part prices are defined on the sales part and can also differ per site:

Sales Parts

Sales Part No	Sales Part Description	Site	Type Of Sales Part	Sales Group	Sales Price Group	Inventory UoM	Price	Price Inc Tax	Base Currency	Rebate Group	Part Description In Use	Part No
P3509845	Electrical wiring box	20 - Ventechi Netherlands	Inventory part	60.09	60	PCS	56.00	70.00	EUR		Electrical wiring box	P3509845 - Electrical wi...
VT3405	VT3405 Sealant	20 - Ventechi Netherlands	Inventory part	60.02	60	PCS	11.99	14.99	EUR		VT3405 Sealant	VT3405 - VT3405 Sealant

Here's a request using the above contract line:

Service Management > Request Management > Invoicing & Closure > Request - Cost and Sales

Request - Cost and Sales 1312 - Repair 1 of 1

Request ID	Description	Customer
1312	Repair	NL20101 - Amazing Web Services Zandvoort

General Information

Request Scope

Request Scope	Service	Status	Planned Total Cost	Planned Total Revenue	Planned Profit Margin	Planned Profit Margin Rate	Actual Total Cost	Actual Total Revenue	Actual Profit Margin	Actual Profit Margin Rate	Base Currency	Invoice Currency	Billing Customer	Delivery
1312	EU20 - Corrective Maintenance	New	223.50	290.00	66.50	22.93	0.00	0.00	0.00	0.00	EUR	NL20101 - Amazon...	A12-0	
			Σ 223.50	Σ 290.00	Σ 66.50		Σ 0.00	Σ 0.00	Σ 0.00	Σ 0.00				

Planned Fixed Price Lines

Sales Part	Sales Price/Base	Sales Price/Curr	Discount%	Sales Price Amount/Base	Sales Price Amount/Curr	Fixed Price Line Source	Price Source	Price Source ID	Price Effective Date	Included Sales Group/Cost Type
(No data)										

Planning Lines

Task No.	Plan Line ID	Cost Type	Cost	Cost Amount	Quantity	Qty To Invoice	Invoice Qty Rule	Revenue %	Markup %	Sales Part Number	Sales Price/Base	Sales Price/Curr	Price Amount/Base	Price Amount/Curr	Price Source
1375	3100	Personnel	90.00	180.00	2	2	As Reported	100	145	20.01 - Normal Time	145	145.00	290.00	290.00	Sales Part
1375	3101	Material	35.00	35.00	1	1	As Reported	0	56	P3509845 - Electrical wi...	56	56.00	0.00	0.00	Sales Part
1375	3102	Material	8.50	8.50	1	1	As Reported	0	11.99	VT3405 - VT3405 Sealant	11.99	11.99	0.00	0.00	Sales Part

Resource price for EU20 is 145.00€ per hour, multiplied by 2 hours gives €290.00 labor price. Material price is €56.00 and €11.99, invoiced at 0%.

Labor Based on Cost, Material Using List Price

The selected price rule specifies that all cost with Cost Type=Personnel (i.e., labor) will be invoiced at cost rate + 45%. Material will be invoiced using list prices.

Invoicing

Invoice Plan Alternative Customer **Price Rule** 36

Benefit Plan

PRICE RULE DETAILS

Price Rule Lines

Type	Sales Group/Cost Type	Include in Fixed Price	Sales Part for Fixed Price	Revenue %	Cost Based Pricing	Markup %	Invoice Zero Amounts
Cost Type	Personnel	No		100	Yes	45	No
Cost Type	Material	No		100	No		Yes
All Other		No		100	No		Yes

Labor price for the resource group EU20 is specified on the resource and can differ per site:

Resource Details

Resource ID: EU20 Resource Description: Ventechi Servitization... Resource Type: Person Group

GENERAL COST

Connection Type	Company	Site	Currency Code
Site	VSEU - Ventechi Servitization Europe	10 - Ventechi Sweden	EUR
Site	VSEU - Ventechi Servitization Europe	20 - Ventechi Netherlands	EUR
Site	VSEU - Ventechi Servitization Europe	30 - Ventechi Germany	EUR
Site	VSEU - Ventechi Servitization Europe	40 - Ventechi France	EUR
Site	VSEU - Ventechi Servitization Europe	50 - Ventechi UK	EUR
Site	VSEU - Ventechi Servitization Europe	70 - Ventechi Spain	EUR
Site	VSEU - Ventechi Servitization Europe	80 - Ventechi Italy	EUR
Company	VSEU - Ventechi Servitization Europe		EUR

Resource General Cost

Cost	Validity Period
90.00 EUR	1/1/2023 - 12/31/9999

The example uses site 20, hence the resource cost is €90.00. Here's a request using the above contract line:

Request - Cost and Sales

Description: Repair
Created by: NL20101
Customer: NL20101
Source: Manual

Request Scope	Status	Planned Total Cost	Planned Total Revenue	Planned Profit Margin	Planned Profit Margin Rate	Actual Total Cost	Actual Total Revenue	Actual Profit Margin	Actual Profit Margin Rate	Base Currency	Invoice Currency	Billing Customer
1314 EU20 - Corrective Maintenance	New	223.50	328.99	105.49	32.06	0.00	0.00	0.00	0.00	EUR	EUR	NL20101 - Amazing Web Services Zandvoort

Planned Fixed Price Lines

Sales Part	Sales Price/Base	Sales Price/Curr	Discount%	Sales Price	Amount/Base	Amount/Curr	Fixed Price Line Source	Price Source	Price Source ID	Price Effective Date	Included Sales Group/Cost Type
(No data)											

Planning Lines

Task No.	Plan Line ID	Cost Type	Cost	Cost Amount	Quantity	Qty To Invoice	Invoice Qty Rule	Revenue %	Markup %	Sales Part Number	Sales Price/Base	Sales Price/Curr	Price Amount/Base	Price Amount/Curr	Price Source
1376	3104	Material	35.00	35.00	1	1	As Reported	100	P3509845 - Electrical w...	56	56.00	56.00	56.00	56.00	Sales Part
1376	3105	Material	8.50	8.50	1	1	As Reported	100	VT3405 - VT3405 Sealant	11.99	11.99	11.99	11.99	11.99	Sales Part
1376	3101	Personnel	90.00	180.00	2	2	As Reported	100	45 - 20.01 - Normal Time	130.5	130.50	261.00	261.00	261.00	Cost Based

Resource cost for EU20 is 90.00€ per hour, with a 45% markup the price is €130.50, multiplied by 2 hours gives €261.00 labor price. Material price is €56.00 and €11.99, invoiced at list price.

Auxiliary Material Free of Charge, Material Discounted

The selected price rule specifies that all parts will be priced at 90% (i.e., a 10% discount), auxiliary material (Sales Group=60.02) is free of charge (Revenue %=0). Labor will be invoiced using list prices.

Invoicing

Invoice Plan	Alternative Customer	Price Rule
		37

Benefit Plan

SERVICES	COVERAGE	PRICE RULE DETAILS	SLA	URGENCY																																								
Price Rule Lines																																												
<table border="1"> <thead> <tr> <th>Type</th> <th>Sales Group/Cost Type</th> <th>Include in Fixed Price</th> <th>Sales Part for Fixed Price</th> <th>Revenue %</th> <th>Cost Based Pricing</th> <th>Markup %</th> <th>Invoice Zero Amounts</th> </tr> </thead> <tbody> <tr> <td>Sales Group</td> <td>60.02</td> <td>No</td> <td></td> <td>0</td> <td>No</td> <td>Yes</td> <td></td> </tr> <tr> <td>Cost Type</td> <td>Personnel</td> <td>No</td> <td></td> <td>100</td> <td>No</td> <td>No</td> <td></td> </tr> <tr> <td>Cost Type</td> <td>Material</td> <td>No</td> <td></td> <td>90</td> <td>No</td> <td>Yes</td> <td></td> </tr> <tr> <td>All Other</td> <td></td> <td>No</td> <td></td> <td>100</td> <td>No</td> <td>Yes</td> <td></td> </tr> </tbody> </table>					Type	Sales Group/Cost Type	Include in Fixed Price	Sales Part for Fixed Price	Revenue %	Cost Based Pricing	Markup %	Invoice Zero Amounts	Sales Group	60.02	No		0	No	Yes		Cost Type	Personnel	No		100	No	No		Cost Type	Material	No		90	No	Yes		All Other		No		100	No	Yes	
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Cost Type	Personnel	No		100	No	No																																						
Cost Type	Material	No		90	No	Yes																																						
All Other		No		100	No	Yes																																						

One of the required parts (VT3405 Sealant) belongs to sales group 60.02:

Sales Parts

Sales Part No	Sales Part Description	Site	Type Of Sales Part	Sales Group	Sales Price Group	Inventory UoM	Price	Price Ind Tax	Base Currency	Rebate Group	Part Description In Use	Part No
P3509845	Electrical wiring box	20 - Venetech Netherlands	Inventory part	60.09	60	PCS	56.00	70.00	EUR		Electrical wiring box	P3509845 - Electrical w...
VT3405	VT3405 Sealant	20 - Venetech Netherlands	Inventory part	60.02	60	PCS	11.99	14.99	EUR		VT3405 Sealant	VT3405 - VT3405 Sealant

Here's a request using the above contract line:

Request Management > Invoicing & Closure > Request - Cost and Sales

Request ID		Description	Customer																																																																										
1315		Repair	NL20101 - Amazing Web Services Zandvoort																																																																										
Description: Repair Created: 7/12/2023, 9:45 AM Created By: TSGCNL Customer: NL20101 Source: Manual																																																																													
General Information		Base Currency	Invoice Currency	Sales Site	Customer Reference																																																																								
EUR		EUR		20 - Venetech Netherlands																																																																									
Request Scope		Price Details																																																																											
		Request Scope	Service	Status	Planned Total Cost	Planned Revenue	Planned Profit Margin	Planned Profit Margin Rate	Actual Total Cost	Actual Total Revenue	Actual Profit Margin	Actual Profit Margin Rate	Base Currency	Invoice Currency	Billing Customer	Delivery																																																													
		1320	EU20 - Corrective Maintenance	New	223.50	340.40	116.90	34.34	0.00	0.00	0.00	0.00	EUR	NL20101 - Amazon...	A12-0																																																														
					Σ 223.50	Σ 340.40	Σ 116.90		Σ 0.00	Σ 0.00	Σ 0.00	Σ 0.00																																																																	
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Task No	Plan Line ID	Cost Type	Cost	Cost Amount	Quantity	Qty To Invoice	Invoice Qty Rule	Revenue %	Markup %	Sales Part Number	Sales Price/Base	Sales Price/Curr	Price Amount/Base	Price Amount/Curr	Price Source																																																														
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1	1377	3107	Material	35.00	35.00	1	1 As Reported	90	0	P3509845 - Electrical wiring box	56	56.00	50.40	50.40	Sales Part																																																														

Sealant is invoiced at €0.00, the wiring box has a list price of €56.00, 10% discount i.e., discounted price is €50.40.

Customer-individual Parts Pricing

Instead of using the standard pricing, Customer Agreements provide the possibility to define customer-specific pricing. For customer NL20101 the agreement below reduces the price for the wiring box to €49.00 and applies a 15% discount on the sealant.

Customer Agreement CA20011 - Service Agreement ▾ 1 of 1

Active

Status ▾ Print ▾ Share ▾ Price Adjustments ▾ Add New Sales Parts Document Text Translation

Agreement	Description	Customer	Coordinator	Assortment	Currency																																					
CA20011	Service Agreement	NL20101 - Amazing Web Services Zandvoort	EDSTNL - Edgar St...		EUR																																					
GENERAL DEAL PER PART DEAL PER SALES GROUP VALID FOR SITES																																										
<table border="1"> <thead> <tr> <th>Sales Part No</th> <th>Sales Part Description</th> <th>Sales Group</th> <th>Base Price Site</th> <th>Base Price/Curr</th> <th>Calc Sales Price</th> <th>Price/Curr</th> <th>Discount Type</th> <th>Discount (%)</th> <th>UoM</th> <th>Rounding</th> <th>Net Price</th> <th>Price Incl Tax</th> </tr> </thead> <tbody> <tr> <td>P3509845</td> <td>Electrical wiring box</td> <td>60.09 - Low-Voltage Equipment</td> <td>20</td> <td>56.00</td> <td>56.00</td> <td>49.00</td> <td></td> <td></td> <td>PCS</td> <td>No</td> <td>No</td> </tr> <tr> <td>VT3405</td> <td>VT3405 Sealant</td> <td>60.02 - Valves and Accessories</td> <td>20</td> <td>11.99</td> <td>11.99</td> <td>11.99</td> <td>G</td> <td>15</td> <td>PCS</td> <td>No</td> <td>No</td> </tr> </tbody> </table>						Sales Part No	Sales Part Description	Sales Group	Base Price Site	Base Price/Curr	Calc Sales Price	Price/Curr	Discount Type	Discount (%)	UoM	Rounding	Net Price	Price Incl Tax	P3509845	Electrical wiring box	60.09 - Low-Voltage Equipment	20	56.00	56.00	49.00			PCS	No	No	VT3405	VT3405 Sealant	60.02 - Valves and Accessories	20	11.99	11.99	11.99	G	15	PCS	No	No
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VT3405	VT3405 Sealant	60.02 - Valves and Accessories	20	11.99	11.99	11.99	G	15	PCS	No	No																															

To be able to use a part in a customer agreement, it needs to be registered at **Sales>Pricing>Base Price>Sales Part Base Prices**. The base price should not be mistaken for being the price entered on Sales Part/General tab. The base price is used for updating sales price lists and customer agreements.

Sales Part Base Prices

Plan Close Add New Sales Parts Update Base Prices Add Sales Parts to Sales Price Lists Update Sales Price Lists from Base Prices Update Customer Agreement from Base Prices

(1)	Base Price Site	Sales Part	Status	Origin from Costing	Cost Set	Baseline Price	Percentage Offset	Amount Offset	Base Price	Sales Price Group	Price UoM	Tax Code	Taxable	Price Break Template
<input checked="" type="checkbox"/>	20	VT3405 - VT3405 Sealant	Active	No		11.99	0.00	0.00	11.99	60 - Service Management - Parts	PCS	1 - Tax with no reduction 25%	Yes	
<input type="checkbox"/>	20	P3509845 - Electrical wiring box	Active	No		56.00	0.00	0.00	56.00	60 - Service Management - Parts	PCS	1 - Tax with no reduction 25%	Yes	
<input type="checkbox"/>	20	P16509845 - Fan Z-type	Active	No		265.00	0.00	-65.00	200.00	60 - Service Management - Parts	PCS	1 - Tax with no reduction 25%	Yes	
<input type="checkbox"/>	20	P2509845 - Mounting plate	Active	No		40.00	0.00	-15.00	25.00	60 - Service Management - Parts	PCS	1 - Tax with no reduction 25%	Yes	
<input type="checkbox"/>	20	P4009845 - Front panel	Active	No		65.00	0.00	-10.00	55.00	60 - Service Management - Parts	PCS	1 - Tax with no reduction 25%	Yes	

Here's a request after adding the customer agreement:

Request - Cost and Sales 1314 - Repair ▾ 1 of 1

New

Request ID Description Customer

1314 Repair NL20101 - Amazing Web Services Zandvoort

General Information

Request Scope

Price Details

(1)	Request Scope	Service	Status	Planned Total Cost	Planned Total Revenue	Planned Profit Margin	Planned Profit Margin Rate	Actual Total Cost	Actual Total Revenue	Actual Profit Margin	Actual Profit Margin Rate	Base Currency	Invoice Currency	Billing Customer	Delivery Date
<input checked="" type="checkbox"/>	1319	EU20 - Corrective Maintenance	New	223.50	320.19	96.69	30.20	0.00	0.00	0.00	0.00	EUR	EUR	NL20101 - Amazing Web Services Zandvoort	A12-0
				Σ 223.50	Σ 320.19	Σ 96.69		Σ 0.00	Σ 0.00	Σ 0.00	Σ 0.00				

ACTUAL PLANNING

Planned Fixed Price Lines

(No data)	Sales Part	Sales Price/Base	Sales Price/Curr	Discount%	Sales Price Amount/Base	Sales Price Amount/Curr	Fixed Price Line Source	Price Source	Price Source ID	Price Effective Date	Included Sales Group/Cost Type
-----------	------------	------------------	------------------	-----------	-------------------------	-------------------------	-------------------------	--------------	-----------------	----------------------	--------------------------------

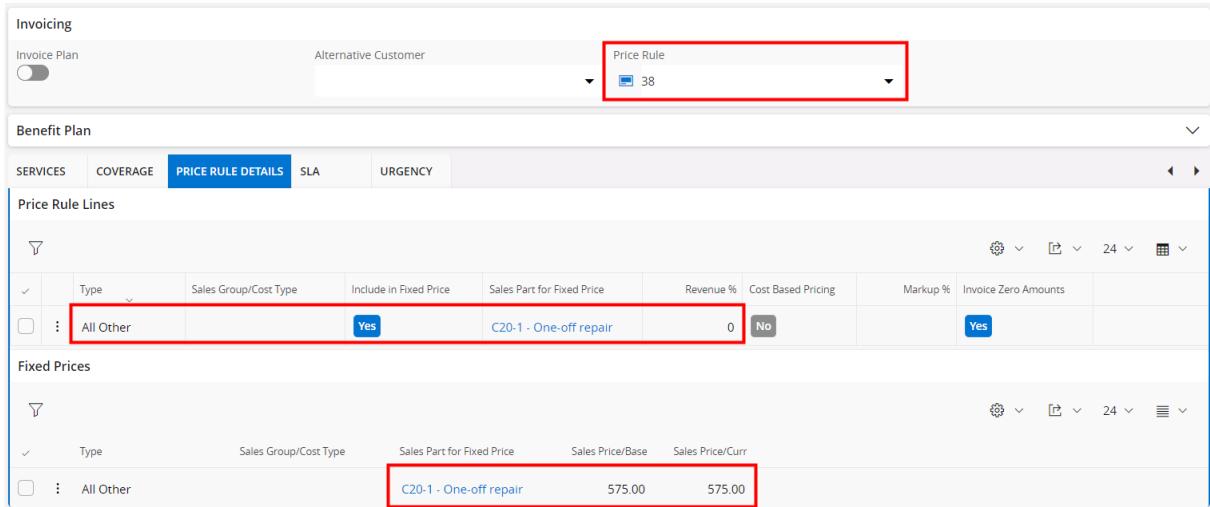
Planning Lines

(No data)	Task No	Plan Line ID	Cost Type	Cost	Cost Amount	Quantity	Qty To Invoice	Invoice Qty Rule	Revenue %	Markup %	Sales Part Number	Sales Price/Base	Sales Price/Curr	Price Amount/Base	Price Amount/Curr	Price Source
<input type="checkbox"/>	1376	3104	Material	35.00	35.00	1	1	As Reported	100		P3509845 - Electrical wiring box	49	49.00	49.00	49.00	Agreement
<input type="checkbox"/>	1376	3105	Material	8.50	8.50	1	1	As Reported	100		VT3405 - VT3405 Sealant	11.99	11.99	10.19	10.19	Agreement
<input type="checkbox"/>	1376	3103	Personnel	90.00	180.00	2	2	As Reported	100	45	20.01 - Normal Time	130.5	130.50	261.00	261.00	Cost Based

If the contract defines additional discounts, these are applied to the agreement price, not the list price.

Fixed Price for the Entire Service

The selected price rule specifies that all time and material is included in a fix price (it would still be possible to have certain parts that are invoiced on top of the fixed price).

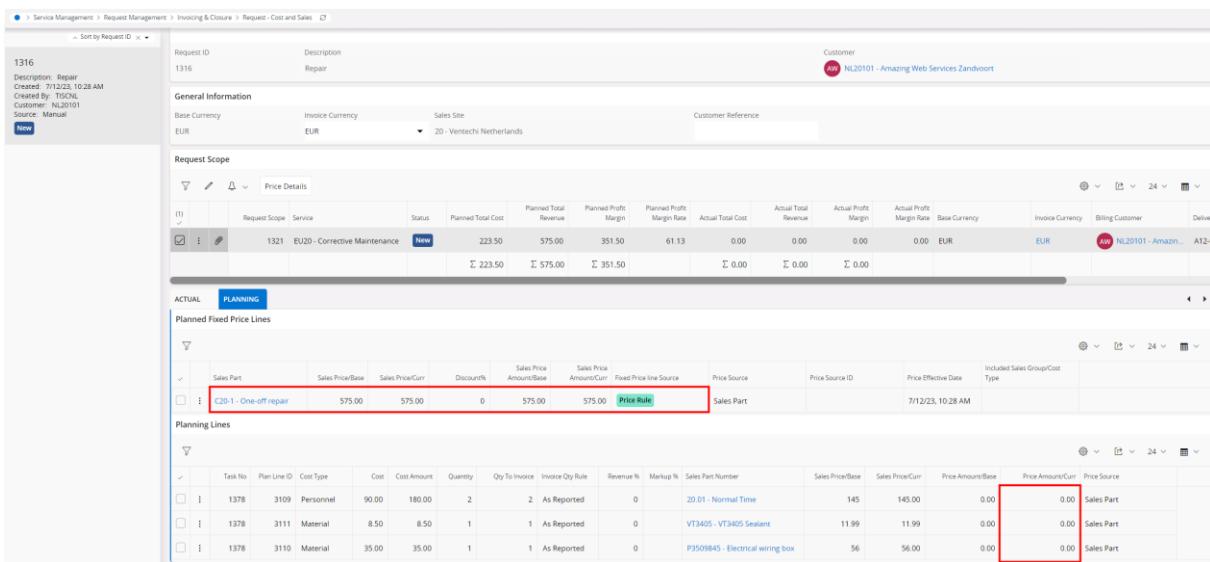


The screenshot shows the IFS Cloud interface for managing price rules and fixed prices. In the 'Price Rule Details' section, a rule named 'C20-1 - One-off repair' is selected. In the 'Fixed Prices' section, the same rule is listed with a value of 575.00.

Type	Sales Group/Cost Type	Include in Fixed Price	Sales Part for Fixed Price	Revenue %	Cost Based Pricing	Markup %	Invoice Zero Amounts
All Other	Yes	C20-1 - One-off repair	0	No		Yes	

Type	Sales Group/Cost Type	Sales Part for Fixed Price	Sales Price/Base	Sales Price/Curr
All Other	C20-1 - One-off repair	575.00	575.00	

Here's a request using the above contract line:



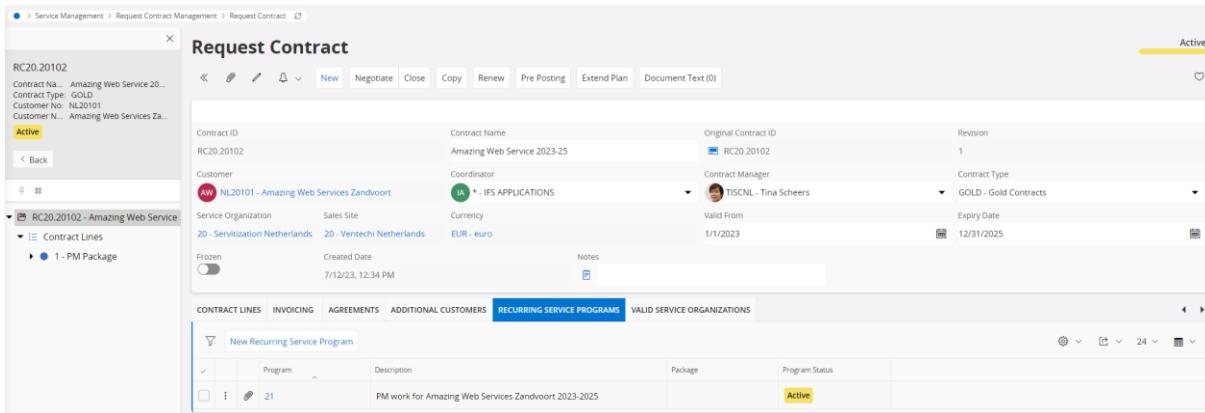
The screenshot shows a request management screen for a repair request. It includes a 'Planned Fixed Price Lines' section where the previously defined rule is applied to a service part.

Sales Part	Sales Price/Base	Sales Price/Curr	Discount%	Sales Price Amount/Base	Sales Price Amount/Curr	Fixed Price Line Source	Price Source	Price Source ID	Price Effective Date	Included Sales Group/Cost Type
C20-1 - One-off repair	575.00	575.00	0	575.00	575.00	Price Rule			7/12/23, 10:28 AM	

Price for the entire service is €575.00, all individual items are priced at €0.00.

Contracts and Recurring Services

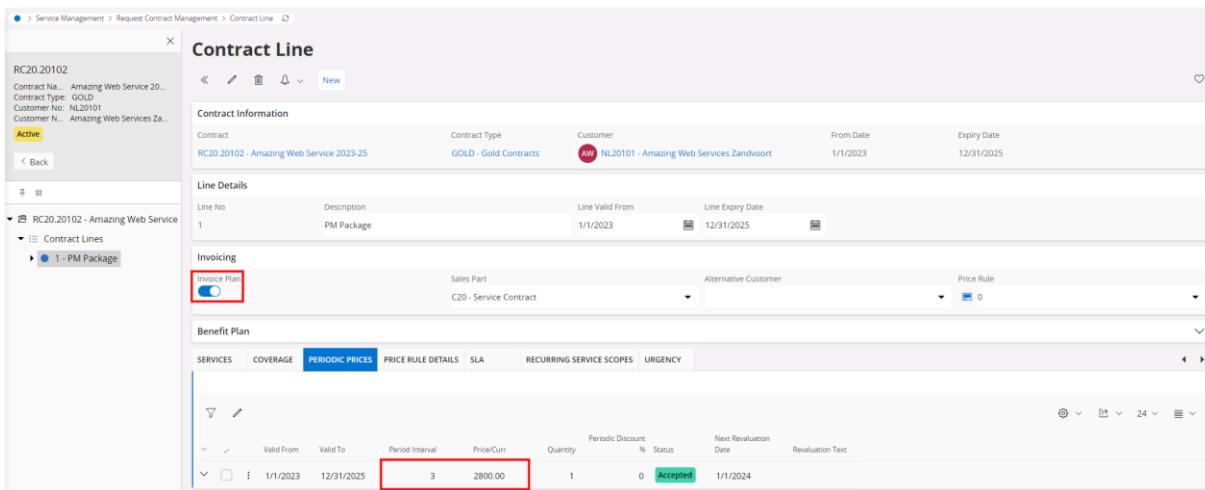
It is possible to create one or more **Recurring Service Programs (RSP)** directly from the Request Contract (RC). Alternatively, the RSP can also be linked to the Request Contract with every scope linked to a specific contract line.



The screenshot shows the 'Request Contract' screen for contract RC20.20102. The 'RECURRING SERVICE PROGRAMS' tab is selected, displaying a table with one row:

Program	Description	Package	Program Status
21	PM work for Amazing Web Services Zandvoort 2023-2025		Active

In this combination the RSP defines the service to be carried out, while the RC and the contract line define how the service is invoiced. The *Invoicing* tab on the RC defines the invoicing cycle. In the example below an invoice is created every single month.



The screenshot shows the 'Contract Line' screen for contract line 1 of RC20.20102. The 'PERIODIC PRICES' tab is selected, displaying a table with one row:

Valid From	Valid To	Period Interval	Price/Curr	Quantity	Periodic Discount %	Status	Next Revaluation Date	Revaluation Text
1/1/2023	12/31/2025	3	2800.00	1	0	Accepted	1/1/2024	

The contract line specifies the pricing of the recurring service. In the example below, the price for the PM Package is €2,800.00 per month to be invoiced every 3 months. The price rule typically sets all T&M prices to zero, it may however still be possible to invoice expenses.

Service Management > Request Contract Management > Request Contract

Request Contract

RC20.20102

Contract No.: Amazing Web Service 20...
Contract Type: GOLD
Customer No.: NL20101
Customer Name: Amazing Web Services Za...

Active

Contract ID: RC20.20102
Customer: AW NL20101 - Amazing Web Services Zandvoort
Service Organization: 20 - Servitization Netherlands
Sales Site: 20 - Ventechi Netherlands
Frozen: Created Date: 7/12/23, 12:34 PM
Notes:

Original Contract ID: RC20.20102
Coordinator: * - IFS APPLICATIONS
Contract Manager: TISCNL - Tina Scheers
Valid From: 1/1/2023
Revision: 1
Contract Type: GOLD - Gold Contracts
Expiry Date: 12/31/2025

INVOICING

CONTRACT LINES AGREEMENTS ADDITIONAL CUSTOMERS RECURRING SERVICE PROGRAMS VALID SERVICE ORGANIZATIONS

General

Price Unit Length: 1	Price Unit: Month	Create Period Allocation: <input checked="" type="checkbox"/>	Invoice Rule: Prior	Allow Batch Invoicing: <input checked="" type="checkbox"/>
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Periodic Invoicing

Plan Start Date: 1/1/2023	Plan End Date: 12/31/2025	Interval: 1	Revaluation: First Revaluation Date: 1/1/2024	Revaluation Type: 40 - Standard Index Revaluation (...)
Interval Unit: Month	Occurrences: 36		Revaluation Interval: 1	Interval Unit: Year

Invoice Periods

Date From: 1/1/2023	Date To: 1/31/2023
Date From: 2/1/2023	Date To: 2/28/2023

The result is a January invoice of €8,400.00 covering the PM work from Jan to March (the RC header specified Invoice Rule=Prior). There is no invoice for Feb and Mar.

Sales > Invoicing > Customer Invoice

Customer Invoice

NL20101 - Amazing Web Services Zandvoort - 220000001 - CUSTORDDEB - *1001 1 of 1

Posted Auth

Customer No.: AW NL20101
Customer Address Name: Amazing Web Services Zand...
Series ID: CD
Invoice No.: 220000001
Company: VSEU - Ventechi Servitization...
Site: 20
Invoice Created: 7/12/2023
Order Created: 7/12/2023

Amounts

Currency: EUR	Gross Amt: 8400.00	Net Amt: 8400.00	Tax Amt: 0.00	Currency Rate: 1	Tax Currency Rate: 1
---------------	--------------------	------------------	---------------	------------------	----------------------

LINES

Pos	Invoice Item	Description	Invoiced Qty	Sales UoM	Price Qty	Price UoM	Sales Price	Inc Tax/Curr	Charge (%)	Charge Basis/Curr	Discount (%)	Group Discount (%)	Order No.
1	C20	Service Contract	1	pcs	1	pcs	8400.00	8400.00	0	0	0	*1001	

Request Contract Quotes

Quotations can be created in multiple ways:

- Create quotation when creating the request contract. At the bottom of the *New Request Contract* page, activate **Quotation Needed** and provide the necessary details.
- Create quotation for an existing request contract using the **New Quotation** button. Contract status must be Planned. All contract lines will be added to quotation. Contract lines added after creating the quotation will be automatically connected to the quote.
- Create quotation when renewing the request contract. At the bottom of the *Renew Request Contract* panel, activate **Quotation Needed** and provide the necessary details.

Quotation lines always reflect contract lines i.e.; to quote additional services these must be added to the contract and will automatically show up on the quotation.

The **Print Quotation Draft** button is available while the quote status is New. Once the status changes to Sent for Approval, the **Print Quotation** button can be used to print/preview the quote. While waiting for approval, the contract lines are frozen, and a message is displayed to the user:

Request Contract

Contract ID: RC10.103 | Status: Planned

New Activate Close Copy Pre Posting Quotation Details Extend Plan Document Text (0)

Request Contract is connected to Quotation RC10.103-001 - RC10.103 Quote which has been sent for approval

Contract ID	Contract Name	Original Contract ID	Revision
RC10.103	Ivar Lindahl	RC10.103	1
Customer	Coordinator	Contract Manager	Contract Type
 SEC2032 - Ivar Lindahl	 ALHOSE - Aleksander Holmberg	 ALHOSE - Aleksander Holmberg	SLA - Service Level Agreement
Service Organization	Sales Site	Valid From	Expiry Date
10 - Servitization Sweden	10 - Ventechi Sweden	SEK - Swedish Krona	5/25/2025
Frozen	Created Date	Notes	
<input checked="" type="checkbox"/>	5/25/23, 6:28 PM		

Once the quote has been accepted, the contract quotation is set to **Accepted**, and the Request Contract becomes **Active**.

Service Organizations, Access Groups, and Resources

Concept

With complex operations and increasing global service demands, the maintenance organization and the associated site have become a limitation for many organizations.

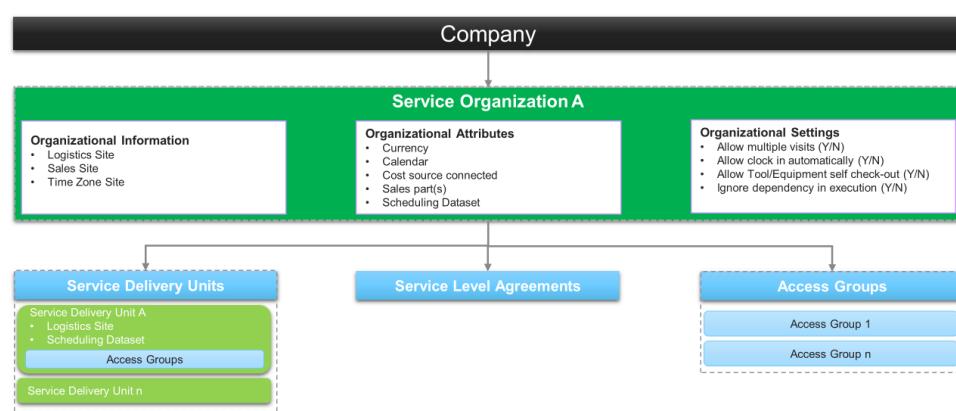
The limitations of the Site concept cause difficulties in supporting a worldwide workforce. This means that sometimes it is not easy to assign the service to the correct service team/department and to transfer work across organizational units. In addition, Sites limit how scheduling datasets are divided, preventing the movement of work and resources between Scheduling Datasets.

Some Service Organizations have a stable organizational structure with little ongoing change. But for others, they often restructure to adjust to new changes inside or outside the organization, such as expanding their service areas. Before, the link between Maintenance Organizations and Sites made it hard for many organizations to manage and move work and resources across different organizations.

Benefits of the improved Service Organization handling include:

- A Service Organization is an independent entity within the service domain that does not rely on any Maintenance Organization or Maintenance Organization Site.
- The Service Organization can be set up to match the existing organizational hierarchy of the service provider, and to assign organizational owners to Service Work and Service Resources.
- If required, a structure can be created by adding Service Delivery Units as smaller sub-groups of the Service Organization.
- Access control for Service Organizations and Service Delivery Units can be configured.
- Various service-related settings from Maintenance Organization and Maintenance Organization Site are now consolidated on the Service Organization.

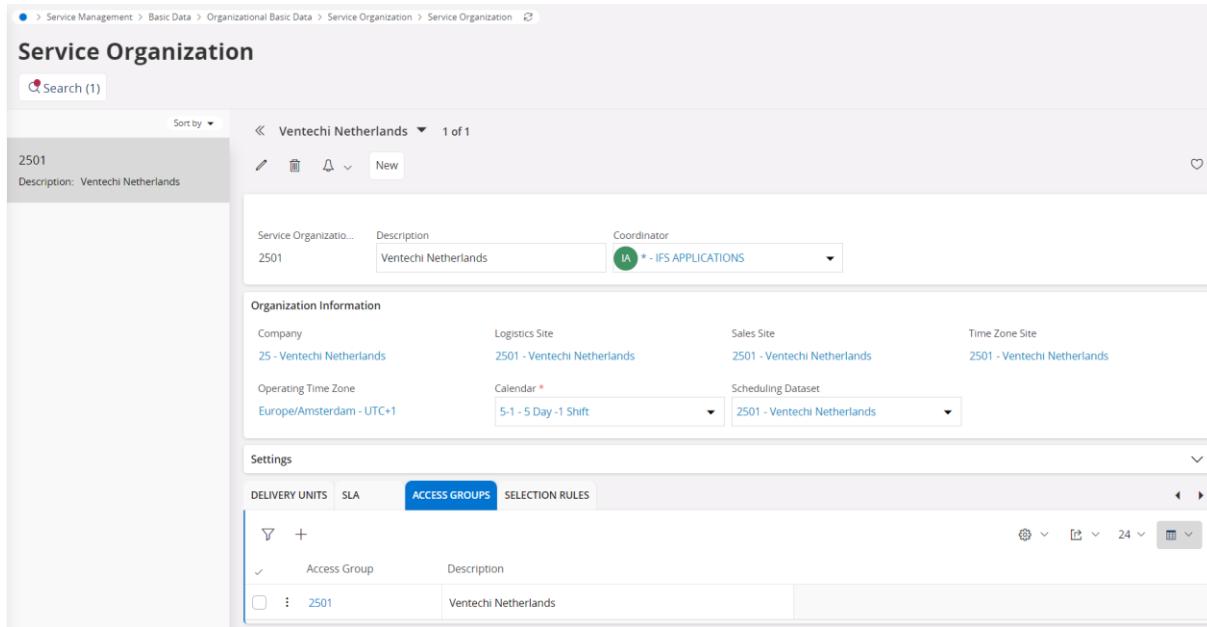
Service Organization Evolution Concept



Service Organization (25R1)

 Service Management>Basic Data>Organizational Basic Data>Service Organization>Service Organization

Service Organization is the organization that owns Requests, Request Contracts, and Request Quotations. It also offers services defined in the Service Catalog.



The screenshot shows the IFS Service Organization configuration interface. The main title is 'Service Organization' with a subtitle '2501 - Ventechi Netherlands'. The interface includes a search bar, a toolbar with edit, delete, and new buttons, and a navigation bar with 'Sort by' and '1 of 1'. The main content area is divided into sections: 'Organization Information' and 'Settings'. In 'Organization Information', fields include Company (25 - Ventechi Netherlands), Logistics Site (2501 - Ventechi Netherlands), Sales Site (2501 - Ventechi Netherlands), and Time Zone Site (2501 - Ventechi Netherlands). In 'Settings', there are tabs for 'DELIVERY UNITS', 'SLA', 'ACCESS GROUPS' (which is selected), and 'SELECTION RULES'. Under 'ACCESS GROUPS', there is a table with one row: 'Access Group' (2501) and 'Description' (Ventechi Netherlands).

The Service Organization uses the following attributes:

- **Time Zone Site:** Only used to get the date/time for the Request Work Task.
- **Logistics Site:** The default Logistics Site governs the Part Site on Material lines on a Work Task (unless an Alternative Logistics Site has been defined on the Service Delivery Unit).
- **Sales Site:** The default Sales site that governs the Sales Part Site of the Request.
- **Calendar:** Used in Scheduling.
- **Sales Part:** This (optional) Sales Part is used in generating the Sales lines in the Request Work Tasks.
- **Scheduling Dataset:** This dataset is automatically used on Request Work Tasks/Request Bundle Tasks of the Service Organization when the Scheduling Dataset is not fetched from the Service Delivery Unit. Tasks and the Resources connected to this Service Organization or the Service Delivery Unit will be included in this Dataset by default during the task creation and resource shift generation respectively.

Note: The dataset can be modified anytime but the changes will not be reflected on the existing records.

- **Ignore Dependency In Execution:** If enabled, the dependencies will be ignored during Request Work Task execution in IFS Mobile (MWO). For example, if task #2 has task #1 as a pre-requisite, the user could still start task #1 even if #1 is not yet completed. This is a default setting that can be overridden on the individual Request Work Task a dependency.
- **Allow Multiple Visits:** Used as default value for Request Work Task. If set to **Yes**, PSO is allowed to split the work into multiple visits.

- **Allow Clock In Automatically:** If enabled, Clock In will occur when the Request Work Task Assignments start.
- **Allow Tool/Equipment Check Out:** Enables the Check Out option for Assignments requiring Tool/Equipment self-checkout by technicians.

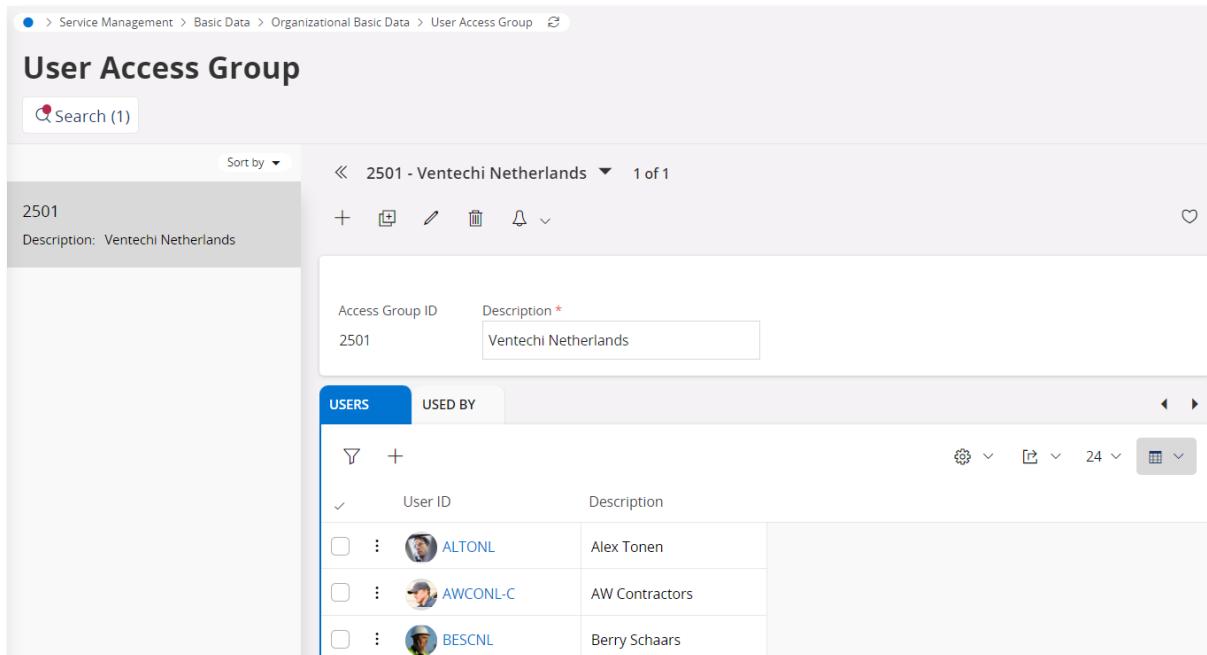
The optional **Service Delivery Units** are responsible for the execution and delivery of work on the Request. A Service Organization can have multiple delivery units, each having its own Alternative Logistics Site. The Alternative Logistic Site has precedence over the Logistic Site in the Service Organization header. The Logistics Site is used as the default site for when material demands are created. One of the Service Delivery Units can be defined as the default so that it will be set as the Service Delivery Unit in the Request Scope and Work Tasks. The Service Delivery Unit can be added/changed from the Request Scope and Request Work Task/Request Work Task - Scheduling & Allocation Pages as well.

All Service Delivery Units added to a Service Organization must belong to the same company and cannot be reused across multiple Service organizations. A Scheduling Dataset can be specified, this will automatically be used on Request Work Tasks/Request Bundle Tasks of the service delivery unit.

SLA: When a Request Scope is created for the Service Organization and there is no other applicable SLA template, the SLA template specified here will be used to create SLA commitments for the Request, Scope, and Tasks. For more details refer to [SLA Management](#).

Access Groups (prior to 24R1 known as Service User Groups) provide view access for Requests and related entities. For more details refer to [Access Control](#). Access Groups can be associated to the Service Organization and to the Service Delivery Units.

[Service Management>Basic Data>Organizational Basic Data>User Access Group](#)



The screenshot shows the 'User Access Group' page in the IFS Cloud interface. The URL in the browser bar is: [Service Management > Basic Data > Organizational Basic Data > User Access Group](#).

The page title is 'User Access Group'. On the left, there is a sidebar with a search bar labeled 'Search (1)' and a 'Sort by' dropdown. Below the search bar, it shows '2501' and 'Description: Ventechi Netherlands'.

The main content area displays the details of the user access group '2501 - Ventechi Netherlands'. It includes fields for 'Access Group ID' (2501) and 'Description' (Ventechi Netherlands). Below this, there are two tabs: 'USERS' (selected) and 'USED BY'. The 'USERS' tab lists three users: ALTONL (User ID), AWCONL-C (User ID), and BESCNL (User ID). Each user entry includes a checkbox, a small profile picture, and the user's name and description.

Access Control

Concept (25R1)

The user-allowed site access in IFS Cloud has restricted the availability of Request Work Task information, which is a major problem for organizations that use Service within IFS Cloud and often need more specific and detailed access for different user groups or users. Additionally, the need for mobile users to have site access creates more limitation and complexity.

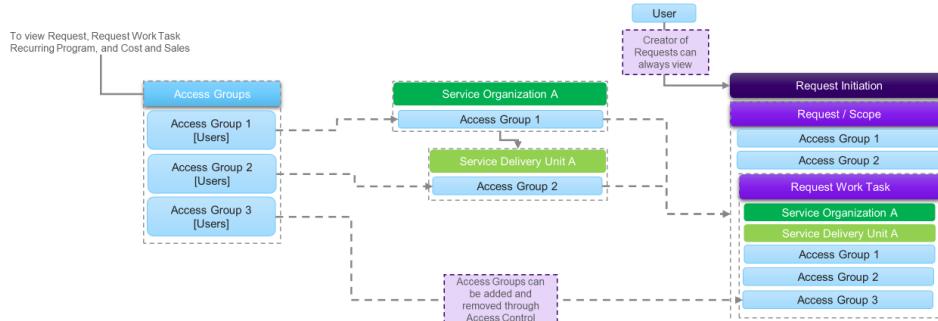
A Service provider should have information access on a Request based on the work owner's organizational structure in the company and be able to configure it at a more granular level than in the site context.

Access Groups allow the associated user to view Request, Request Work Task, Recurring Service Program, and Cost and Sales information. The creator of a Request will always be able to view it.

Access Control

Concept

New way of handling Access Control on Request Management



Benefits of the new access control include:

- More granular access control can be achieved with access groups for Request and Request Work Tasks.
- Reduced administration to facilitate inbound requests taken by centralized call centers, supporting the hand-over to the right service delivery units for work executing.
- Predefined Access Groups from the owning Service Organization or Service Delivery Unit will be inherited at the creation of a Request. These access groups can be removed, and new can be added, after the creation of the Request and Request Work Task.
- Separate dispatcher access control for the Dispatch Console replaces the previous user allowed site access.

Access Control/Access Groups are not only used by Service Organizations and Requests, they are also utilized in Subcontractor Management for providing access to Agreements.

Access Handling (25R1)

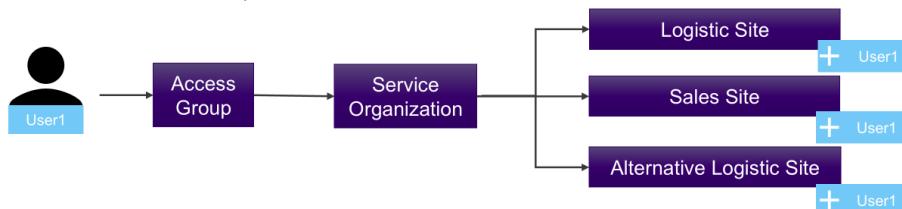
When a user is added to an Access Group associated with a Service Organization, or if an Access Group that already has users is added to the Service Organization, the user will automatically be granted access to the connected Logistic Site, Sales Site, and any alternate logistic sites.

Note: Site access will only be granted to the users who already have **Users per Company** access related to the Service Organization's Company.

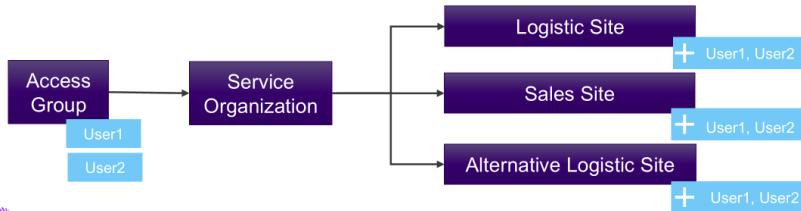
If the Service Organization's Logistic site and Sales site or the Serve Delivery Unit's Logistic Site access is granted automatically, the site access will be removed from the user when they are removed from the Service Organization Access Group.

Request Management: Access Handling Concept

Add a User to an Access Group



Connect an Access Group to the Service Organization



Here's an example: Service Organization 2501 (NL) is connected to site 2501 (NL) and uses an Access Group 2501 (NL).

Service Organization

Search (1)

Sort by ▾

« Ventechi Netherlands ▾ 1 of 1

New

Service Organization...	Description	Coordinator
2501	Ventechi Netherlands	I.A. * - IFS APPLICATIONS

Organization Information

Company	Logistics Site	Sales Site	Time Zone Site
25 - Ventechi Netherlands	2501 - Ventechi Netherlands	2501 - Ventechi Netherlands	2501 - Ventechi Netherlands
Operating Time Zone	Calendar *	Scheduling Dataset	
Europe/Amsterdam - UTC+1	5-1 - 5 Day -1 Shift	2501 - Ventechi Netherlands	

Settings

DELIVERY UNITS SLA ACCESS GROUPS SELECTION RULES

+ <input type="checkbox"/>	Description
+ <input type="checkbox"/> 2501	Ventechi Netherlands

All users of that Access Group 2501...

User Access Group

Search (1)

Sort by ▾

« 2501 - Ventechi Netherlands ▾ 1 of 1

+ New

Access Group ID	Description *
2501	Ventechi Netherlands

USERS USED BY

+ <input type="checkbox"/>	User ID	Description
+ <input type="checkbox"/> ALTONL	ALTONL	Alex Tonen
+ <input type="checkbox"/> AWCONL-C	AWCONL-C	AW Contractors
+ <input type="checkbox"/> BESCNL	BESCNL	Berry Schaars
+ <input type="checkbox"/> BRDNL	BRDNL	Bregje van Dijk

...are automatically granted access to site 2501:

[Application Base Setup > Enterprise > Site > Sites per User](#)

Sites per User

Search (4)

ALTONL - 1 of 4			
User		Default Coordinator	Default Buyer
ALTONL - Alex Tonen		* - IFS APPLICATIONS	* - IFS APPLICATIONS
Default Planner * - IFS APPLICATIONS			
<input type="checkbox"/> + <input type="checkbox"/> Site <input type="checkbox"/> Company <input type="checkbox"/> Default Site			
<input type="checkbox"/> 2501 - Ventechi Netherlands		25	<input checked="" type="checkbox"/> Yes

It is possible to add a user to an Access group, using Service Management>Basic Data>Organizational Basic Data>Service Organization>Service User it's also possible to associate Access Groups to the user.

[Service Management > Basic Data > Organizational Basic Data > Service Organization > Service User](#)

Service User

Search (1)

ALTONL - Alex Tonen 1 of 1			
Description		Identity	
Alex Tonen		ALTONL	
<input type="checkbox"/> ACCESS GROUPS <input type="checkbox"/> ORGANIZATIONS <input type="checkbox"/> COMPANIES			
<input type="checkbox"/> + <input type="checkbox"/> Access Group <input type="checkbox"/> Description			
<input type="checkbox"/> 2001		Ventechi Germany	
<input type="checkbox"/> 2501		Ventechi Netherlands	

The same page also shows the Service Organizations that a user has access to.

Description		Identity	
Alex Tonen		ALTONL	
<input type="checkbox"/> ACCESS GROUPS <input type="checkbox"/> ORGANIZATIONS <input type="checkbox"/> COMPANIES			
<input type="checkbox"/> Connected to Entity Reference			
Service Organization		2001 - Ventechi Germany	
Service Organization		2501 - Ventechi Netherlands	

Access to Requests

When a new Request is created, Access Groups are inherited from the Service Organization and Service Delivery Unit. Users in the User Access Groups have access to the Request. **Access Control** allows the user to add or remove Access Groups for the Request.

Request 1175 - Request with Access Groups ▾ 1 of 1

New Edit Location Status SLA Overview Access Control

Request ID 1175	Description Request with Access Groups	Customer LC NA1057 - Lockbox Customer 1057	Primary Contact																		
Request Information SLA Commitments Active Commitments on this Request		Location and Address Location Address Open Map																			
Classification		Ownership																			
REQUEST SCOPE TASKS SLA PRICE SUMMARY CONTACTS SERVICE NOTES <ul style="list-style-type: none"> New Scope Status New Quotation Edit Scope Edit Location <table border="1"> <thead> <tr> <th>Service</th> <th>Scope Status</th> <th>Connection Type</th> <th>SLA Template</th> <th>SLA Template Source</th> <th>SLA Template Revision</th> <th>Reported Item</th> <th>Problem/Symptom</th> <th>Service Delivery U...</th> </tr> </thead> <tbody> <tr> <td>MJB-111 - New Install</td> <td>New</td> <td>MJB-96HR-RESOLU</td> <td>Service</td> <td>1</td> <td></td> <td></td> <td>MJB</td> <td></td> </tr> </tbody> </table>				Service	Scope Status	Connection Type	SLA Template	SLA Template Source	SLA Template Revision	Reported Item	Problem/Symptom	Service Delivery U...	MJB-111 - New Install	New	MJB-96HR-RESOLU	Service	1			MJB	
Service	Scope Status	Connection Type	SLA Template	SLA Template Source	SLA Template Revision	Reported Item	Problem/Symptom	Service Delivery U...													
MJB-111 - New Install	New	MJB-96HR-RESOLU	Service	1			MJB														

At least one Access Group must exist.

Access Control

Access Group	Description
209	Ventechi Netherlands

OK Cancel

Access to Task and Pickup Tasks

The same applies to the Request Task, which inherits the Access Groups when the Request is created.

Request Work Task 8997 - New Install ▾ 1 of 1

New View Status Dependencies (0) Edit Location Admin Reporting Access Control

Task Details	Pre Posting	Access Control
Task No 8997	Task Description New Install	Created Date 3/26/24, 3:53 ...
Long Description New Install	Request 1175 - Re...	Scope 1511
Invoicing Info USD	Customer LC NA1057 - Lockbox Customer 1057	

When using Pickup Tasks, the Access Groups are copied from the Request Work Task. Again, **Access Control** allows modifications.

When transferring tasks to MWO:

- The MWO user must have access to the Request Work Task through a connected Access Group, otherwise the system will refuse to send the task to MWO.
- If the Request Work Task is transferred as a Pool Task, the task is only sent to MWO users who have task access via the user access groups.

Access to Dispatch Console

To be able to see a Scheduling Dataset in the Dispatch Console, the user must be given access. This is done at *Service>Scheduling>Basic Data>Dispatch Console Dataset Access*, where access can be granted to individual users or an Access Group.

	(1) ✓	Scheduling Dataset ^	Description	Company	Active
<input checked="" type="checkbox"/>	209-DC	Ventechi Netherlands	25	<input checked="" type="checkbox"/>	Yes

	(1) ✓	User Access Group
<input checked="" type="checkbox"/>	209 - Ventechi Netherlands	

Once this access has been granted, the user can see all Resource and Work Task data in that Scheduling Dataset. Drag & Drop and navigation options from the Work Assignment Card to other pages are limited by the access specified on the Request Work Task itself, without appropriate access the user will only get an error message.

Selection Rules (25R1)

[Service Management>Basic Data>General Basic Data>Selection Rule>Selection Rules](#)

Service Organizations and Service Delivery Units own the responsibility for the work done within a Request, Request Scope, or Task. In the past, the Service Organization's default Service Delivery

Unit was automatically selected as the Service Delivery Unit for Scopes, with no option to change it. In earlier releases there was no way to transfer the work to another owning organizational unit.

The default Service Organization for a Service was always the Service Organization that was used in Request Initiation. The user logging the Request did not get any assistance in being able to select the most suitable owning organization for the work.

Within a request, different Scopes and the associated Work Tasks can be owned and managed by different Service Delivery Units and it's possible to make changes on Request, Scope, and Task level.

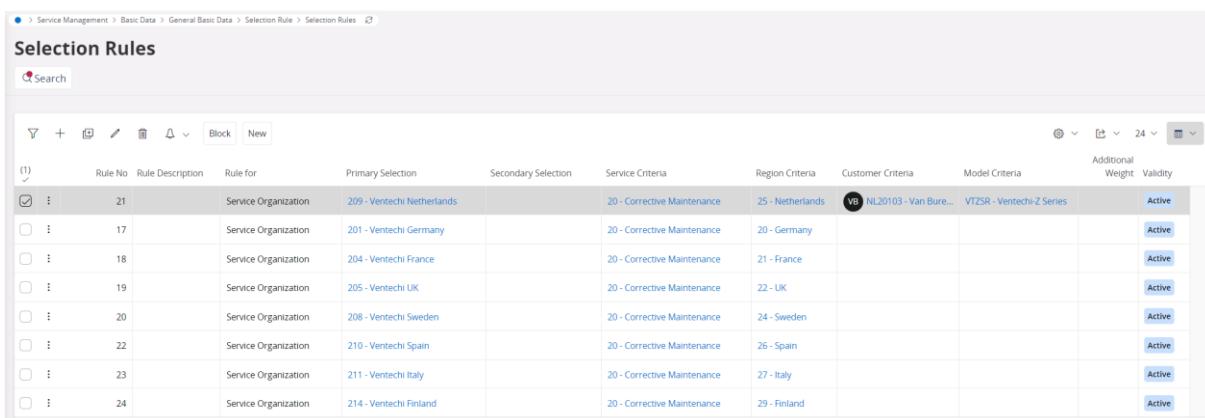
When the Request is initiated using the New Request Assistant, the most suitable Service Organization and Service Delivery Unit for the selected Service can be automatically retrieved by pre-defined rules. Rules will always take precedence over the default Service Organization specified for the Service, if it has been set.

Selection Rules for Service Organizations (25R1*)

When creating a Selection Rule for a Service Organization, specify the following parameters:

- **Rule For:** Service Organization
- **Primary Selection:** The Service Organization that should be selected by this rule.
- **Secondary Selection:** The Service Delivery Unit of the chosen Service Organization.
- **Service Criteria:** Rule should be applied when this Service is chosen on the Request.
- **Region:** The region associated with the Request Location. Since a location can have more than one region associated with it, the logic will check each region in alphabetical order when multiple records exist, until a match is found.
- **Customer:** The customer associated with the Request.
- **Model:** The model associated with the Request.
- **Additional Weight:** Allows setting a priority when more than one rule is found, overriding the pre-defined total weight. The system evaluates which rule has the highest additional weight. See [Selection Rule Types \(25R1*\)](#).

A rule is selected when all provided filter criteria match.



(1)	Rule No	Rule Description	Rule for	Primary Selection	Secondary Selection	Service Criteria	Region Criteria	Customer Criteria	Model Criteria	Additional Weight	Validity
<input checked="" type="checkbox"/>	21		Service Organization	209 - Ventech Netherlands		20 - Corrective Maintenance	25 - Netherlands	NL20103 - Van Bure...	VTSR - Ventech-Z Series		Active
<input type="checkbox"/>	17		Service Organization	201 - Ventech Germany		20 - Corrective Maintenance	20 - Germany				Active
<input type="checkbox"/>	18		Service Organization	204 - Ventech France		20 - Corrective Maintenance	21 - France				Active
<input type="checkbox"/>	19		Service Organization	205 - Ventech UK		20 - Corrective Maintenance	22 - UK				Active
<input type="checkbox"/>	20		Service Organization	206 - Ventech Sweden		20 - Corrective Maintenance	24 - Sweden				Active
<input type="checkbox"/>	22		Service Organization	210 - Ventech Spain		20 - Corrective Maintenance	26 - Spain				Active
<input type="checkbox"/>	23		Service Organization	211 - Ventech Italy		20 - Corrective Maintenance	27 - Italy				Active
<input type="checkbox"/>	24		Service Organization	214 - Ventech Finland		20 - Corrective Maintenance	29 - Finland				Active

Rules can also be created directly from the Service Organization.

Service Organization

Search (1)

Sort by: Ventechi Netherlands 1 of 1

209 Description: Ventechi Netherlands

Service Organization ...	Description	Coordinator
209	Ventechi Netherlands	IA * - IFS APPLICATIONS

Organization Information

Company 25 - Ventechi Netherlands	Logistics Site 209 - Ventechi Netherlands	Sales Site 209 - Ventechi Netherlands	Time Zone Site 209 - Ventechi Netherlands
Operating Time Zone Europe/Amsterdam - UTC+1	Calendar * 5-1 - 5 Day -1 Shift	Scheduling Dataset 209 - Ventechi Netherlands	

Settings

DELIVERY UNITS SLA ACCESS GROUPS SELECTION RULES

New Selection Rule	Rule No.	Description	Service Delivery Unit	Service Criteria	Region Criteria	Customer Criteria	Model Criteria
<input type="checkbox"/>	8			10 - Preventive Mainten...	25 - Netherlands		
<input type="checkbox"/>	21			20 - Corrective Mainten...	25 - Netherlands	NL20103 - Van Buren H...	VTZSR - Ventechi-Z Series
<input type="checkbox"/>	34			30 - Installation	25 - Netherlands		

When a new Request is filed, Service Organization and (optionally) Service Delivery Unit are populated when a matching rule was found. Both can be changed before the Request is created. After Request creation the Service Organization can be changed using [Change of Service Organization \(25R1★\)](#).

Selection Rules for Service Contractors (25R1★)

When creating a Selection Rule for a Service Contractor, specify the following parameters:

- **Rule For:** Service Contractor
- **Primary Selection:** The Service Contractor that should be selected by this rule.
- **Secondary Selection:** The Service Contractor Agreement Line of the chosen Service Contractor.
- **Service Criteria:** Rule should be applied when this Service is chosen on the Request.
- **Region:** The region associated with the Request Location. Since a location can have more than one region associated with it, the logic will check each region in alphabetical order when multiple records exist, until a match is found.
- **Customer:** The customer associated with the Request.
- **Model:** The model associated with the Request.
- **Service Organization:** The Service Organization associated with the Request.
- **Request Contract Line:** The Request Contract Line associated with the Request.
- **Additional Weight:** Allows setting a priority when more than one rule is found, overriding the pre-defined total weight. The system evaluates which rule has the highest additional weight. See [Selection Rule Types \(25R1★\)](#).

A rule is selected when all provided filter criteria match.

Service Management > Basic Data > General Basic Data > Selection Rule > Selection Rules

Selection Rules

Search

Rule No.	Description	Rule for	Primary Selection	Secondary Selection	Service Criteria	Region Criteria	Customer Criteria	Model Criteria	Additional Weight	Service Organization Criteria	Request Contract Line Criteria	Validity
146	Service Contractor	25-DS - Direct Services NL		INSTALLATION - In...	25 - Netherlands	VITZSR - Ventechi-Z Series	NL20103 - Van Bure...					Active

Rules can also be created directly from the Service Contractor.

Service Management > Basic Data > Organizational Basic Data > Service Contractor > Service Contractor

Service Contractor

Search (1)

Sort by		25-DS - Direct Services NL ▾ 1 of 1	Onboarding Completed
Description:	25-DS	Direct Services NL	Onboarding Completed
Supplier ID:	DSNL		

Service Contractor

Contractor ID 25-DS	Description * Direct Services NL	Supplier DSNL - Direct Services NL	Contractor Type 02 - Specialist
------------------------	-------------------------------------	---------------------------------------	------------------------------------

SELECTION RULES

Rule No.	Description	Contractor Agreement Line	Service Criteria	Region Criteria	Customer Criteria	Model Criteria	Service Or Criteria
146		INSTALLATION - Installat...	25 - Netherlands	VITZSR - Ventechi-Z Series	NL20103 - Van Bure...		

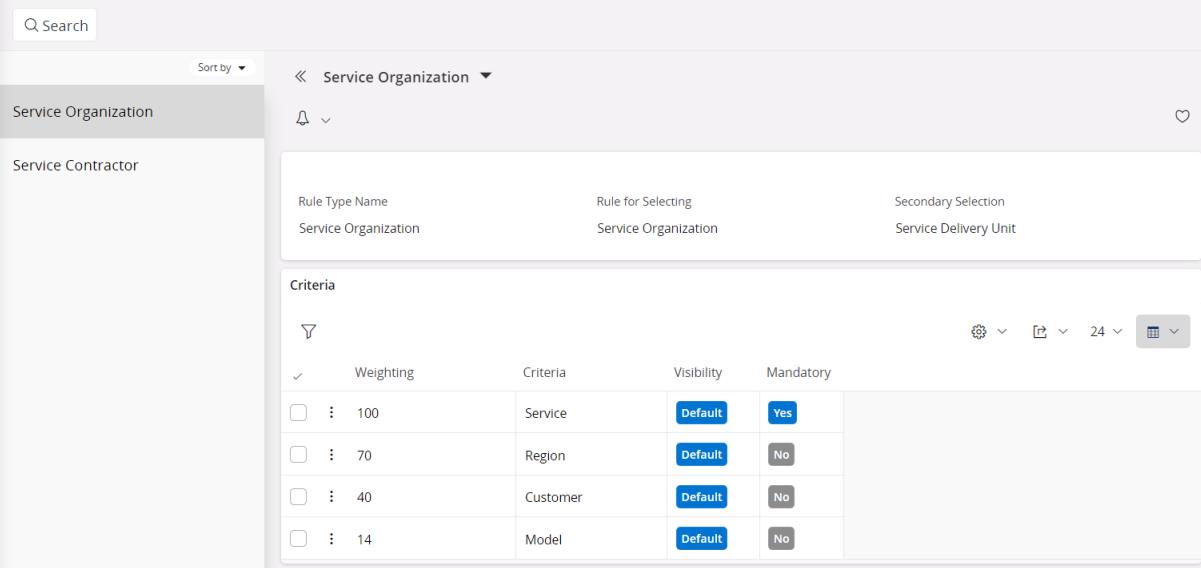
When a new Request is filed, the Service Contractor is chosen when a matching rule is found, and a Contractor Order is created.

Selection Rule Types (25R1★)

Service Management>Basic Data>General Basic Data>Selection Rule>Selection Rule Type

A predefined weight-based Selection Rule Type has been introduced with a set of weighted criteria assigned to different entities, such as Service, Region, Model, and Customer. The weightings are used to determine the search order.

Selection Rule Type



The screenshot shows the 'Selection Rule Type' configuration for the 'Service Organization' rule. The rule type name is 'Service Organization'. The rule for selecting is also 'Service Organization'. The secondary selection is 'Service Delivery Unit'. The criteria section lists four criteria with weights: Service (100), Region (70), Customer (40), and Model (14). The visibility for all criteria is set to 'Default', and the mandatory status is 'Yes' for the Service criterion.

Note: The “Service Organization” Selection Rule Type replaces the previous predefined precedence to find a matching or several suitable rules. The weights are set so that the same precedence as before is mimicked for the selection of the Service Organization.

The Selection Rules are searched based on the precedence created through the criteria weights. The system first searches for the combination with the highest score, then the next best total score by removing the criteria that is deemed as least important, and so on. This process ensures that either an exact match or several suitable selections are found.

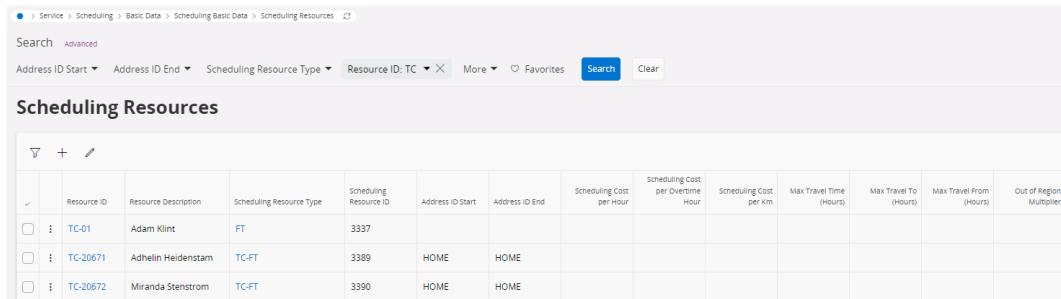
The search looks for exact values, which includes null values (no selection made). This includes empty criteria, to make it possible to create rules for "any" value. For example, not selecting a Model in New Request will search for rules without any Model criteria defined.

If no rules are found, default settings are applied. If multiple rules are found, they are evaluated based on any Additional Weight, with the rule having the highest weight being selected. If no additional weight is present, the rule with the highest rule number is selected.

Precedence	Service	Region	Customer	Model	Combined Weight
1	100	70	40	14	224
2	100	70	40		210
3	100	70		14	184
4	100	70			170
5	100		40	14	154
6	100		40		140
7	100			14	114
8	100				100

Resources

 Service Management>Service Management Basic Data>Resource Basic Data>Service Resource Details



Resource ID	Resource Description	Scheduling Resource Type	Scheduling Resource ID	Address ID Start	Address ID End	Scheduling Cost per Hour	Scheduling Cost per Overtime Hour	Scheduling Cost per Km	Max Travel Time (Hours)	Max Travel To (Hours)	Max Travel From (Hours)	Out of Region Multiplier
TC-01	Adam Flint	FT	3337									
TC-20671	Adhelin Heidenstam	TC-FT	3389	HOME	HOME							
TC-20672	Miranda Stenstrom	TC-FT	3390	HOME	HOME							

For details refer to [Scheduling Demystified](#).

For crews refer to [Scheduling Demystified](#) and [MWO Demystified](#).

Resource Costing

Resource costs are handled through a hierarchical order based on the organizational ownership of the resource. There are two types of costs:

- Planned: Cost defined at the resource level,
- Actual: Calculated when the work has been performed and time has been reported.

Both planned and actual costs will be governed by the owning organization setup.

Planned costs are fetched in the following order of precedence (SO=Service Organization, SDU=Service Delivery Unit, RG=Resource Group).

Resource Type - Person		Resource Type – Tool or Crew
1	Cost defined for a SDU in RG	Cost defined for a SDU in Resource
2	Cost defined for a SO in RG	Cost defined for a SO in Resource
3	Cost defined for a Company in RG	Cost defined for a Company in Resource
4	0	Cost defined for a SDU in RG
5		Cost defined for a SO in RG
6		Cost defined for a Company in RG
7		0

For **Resource and Work Ownership in the same company, actual costs** are fetched in the following order of precedence (SO=Service Organization, SDU=Service Delivery Unit, RG=Resource Group).

Resource Type - Person		Resource Type – Tool or Crew
1	Cost defined from on Salary	Cost defined for SDU of Resource Ownership in an individual Resource
2	Cost defined for SDU of Resource Ownership in RG	Cost defined for SO of Resource Ownership in an individual Resource

Resource Type - Person

Resource Type – Tool or Crew

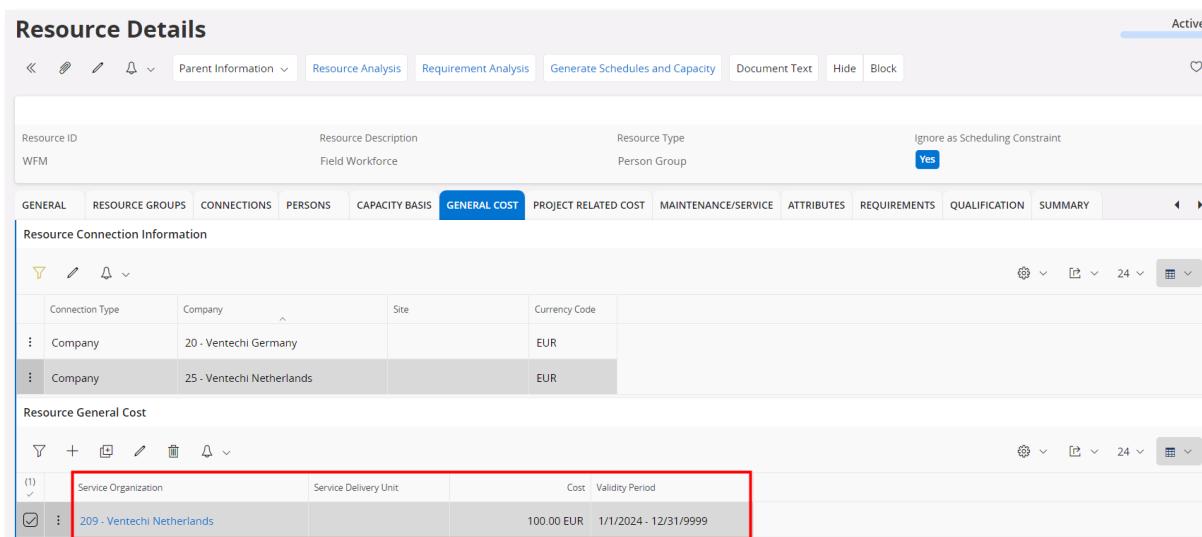
3	Cost defined for SO of Resource Ownership in RG	Cost defined for Company of Resource Ownership in an individual Resource
4	Cost defined for SO of Company in RG	Cost defined for SDU of Resource Ownership in a Primary RG/Demand RG/Reported RG from Resource
5	0	Cost defined for SO of Resource Ownership in a Primary RG/Demand RG/Reported RG from Resource
6		Cost defined for Company of Resource Ownership in a Primary RG/Demand RG/Reported RG from Resource
7		0

For **Resource and Work Ownership in a different company**, **actual costs** are fetched in the following order of precedence (SO=Service Organization, SDU=Service Delivery Unit, RG=Resource Group).

Resource Type - any

1	Cost defined for Primary RG/Demand RG/Reported RG for the SDU stated on the Work Task
2	Cost defined for Primary RG/Demand RG/Reported RG for the SO stated on the Work Task
3	Cost defined for Primary RG/Demand RG/Reported RG for the Company stated on the Work Task
4	0

Planned cost of a Resource can be specified (as cost per hour) for a specific Service Organization and/or Service Delivery Unit.



The screenshot shows the 'Resource Details' screen with the 'GENERAL COST' tab selected. Under 'Resource Connection Information', there are two entries: 'Company' (20 - Ventechi Germany) and 'Company' (25 - Ventechi Netherlands). Under 'Resource General Cost', a table lists a single entry: 'Service Organization' (209 - Ventechi Netherlands) with a 'Cost' of '100.00 EUR' and a 'Validity Period' from '1/1/2024' to '12/31/9999'. This last row is highlighted with a red box.

The planned cost amount is fetched from the planned resource group.

Request Work Task 7 - Corrective Maintenance 1 of 1

New |       Status Dependencies (0) Edit Location Admin Transfer To Mobile Reporting

Task Details		Location and Address																													
Task No	Task Description	Created Date	Location																												
7	Corrective Maintenance	4/23/24, 4:17 PM	706 - Joan Muiskenweg 20, NL																												
Long Description	Request Scope	Address	Joan Muiskenweg 20 Amsterdam, 1096 CJ NL.																												
Corrective Maintenance	1 - Repair	7																													
Invoicing Info	Customer	Open Map																													
EUR	NL20103 - Van Buren Hotel Amst...																														
Item Details		Task Dates																													
Reported Item	Actual Connection Type	Actual Item	SLA Commitments																												
NLVTZ2097 - VENTECHI Z SERIES U...	EQUIPMENT	NLVTZ2097 - VENTECHI Z SER...	No Active Commitments on this Task																												
Actual Object Site	Earliest Start	Latest Start	Duration (h)																												
209 - Ventechi Netherlands			1.5																												
Fixed Start	Planned Start	Planned Finish																													
Actual Start	Actual Finish																														
																															
Task Attributes																															
Planning and Scheduling																															
ASSIGNMENTS RESOURCES STEPS MATERIAL RETURNS SLA TIME REPORTS PLANNED COST AND SALES COSTS SALES SERVICE NOTES																															
Demand <table border="1"> <thead> <tr> <th colspan="2">Demand Line No</th> <th colspan="2">Demand Type</th> <th>Resource Group</th> <th>Planned Quantity</th> <th>Cost</th> <th>Overhead Cost</th> <th>Cost Amount</th> <th>Sales Part</th> <th>Unit Sales Price/Base</th> <th>Unit Sales Price/Curr</th> <th>Discount %</th> <th>Additional Qualifications</th> </tr> </thead> <tbody> <tr> <td colspan="2">(1)</td> <td colspan="2">Person</td> <td>WFM - Field Workforce</td> <td>1</td> <td>100.00</td> <td>0.00</td> <td>150.00</td> <td></td> <td></td> <td></td> <td></td> <td>Yes</td> </tr> </tbody> </table>				Demand Line No		Demand Type		Resource Group	Planned Quantity	Cost	Overhead Cost	Cost Amount	Sales Part	Unit Sales Price/Base	Unit Sales Price/Curr	Discount %	Additional Qualifications	(1)		Person		WFM - Field Workforce	1	100.00	0.00	150.00					Yes
Demand Line No		Demand Type		Resource Group	Planned Quantity	Cost	Overhead Cost	Cost Amount	Sales Part	Unit Sales Price/Base	Unit Sales Price/Curr	Discount %	Additional Qualifications																		
(1)		Person		WFM - Field Workforce	1	100.00	0.00	150.00					Yes																		

Calculated Total Cost after Time Reporting is based on the organizational ownership of the resource.

TIME REPORTS SLA STEPS COSTS SALES ASSIGNMENTS MATERIAL RETURNS RESOURCES PLANNED COSTS AND SALES SERVICE NOTES

TIME REPORTS										Hours	Total Cost	Transaction Status	Task Transaction ID	Comment
Task No	Task Description	Demand Type	Time Type	Resource Group	Resource ID	Transaction Date	2.5	250	reported	6	Alex Tone			
7	Corrective Maintenance	Person	1010 - FSE Working Time	WFM - Field Workforce	ALTONL	4/23/24, 4:30 PM								

Service Contractor Management (25R1↗)

What's new and what's coming? (25R1↗)

Service Contractor Management started in 25R1 and will continue to evolve over the next release(s). The 25R1 release establishes the foundation and includes:

- **Service Contractor:** Easily define service contractors, link them to suppliers and define cost rules, purchase parts, contacts, and resources.
- **Contractor onboarding:** Ensure compliance and readiness with internal and external checklists before a contractor is ready for use.
- **Contractor Agreements:** Set up agreements to control coverage and costs, with the ability to cover a full or partial existing customer contract or as a stand-alone frame agreement.
- **Costing:** Benefit from automatic costing of transactions based on service contractor cost rules and/or agreements. The ability to support both T&M and fixed price arrangements.
- **Billing / Self-Billing:** Automatic Purchase Order creation for work and agreements, either on a job-by-job basis or for a period of time.
- **Contractor Payments:** Payment through standard accounts payable processes
- **Automatic assignment of work based on Rules:** Define selection rules to automatically award work to contractors based on agreement, service, customer, region and model.
- **APIs:** Connect with other systems using purpose-built integration APIs.
- **Access Control:** Access control built-in, to ensure contractors only access the data they should.

Current limitations that are planned to be removed in later releases:

- Contractor Portals are not part of 25R1. Customer Engagement Portal, however, can be used in the meantime, utilizing the purpose-built APIs.
- It is not possible to award Bundle Tasks to contractors.
- Material and Warehouse handling for Contractors is not supported yet. It's still possible for contractors to report usage to get paid through payment lines, but warehouse and stock control will be delivered in a future release.
- The initial release is integrated with Request Management exclusively and does not support Work Order and Work Task, however there are plans to change this in the future.
- Mobile Work Order (MWO) is not supported. The main reason is that the functionality for payment lines and contractor orders in MWO has not been developed yet. The payment lines are what a contractor is expected to use for reporting. For a fixed price scenario, the contractor would usually not amend the prepopulated payment lines, however, they could. For a time and material scenario, the contractor would update existing or create new payment lines based on actual usage. As the financials/transactions work differently when work is subcontracted, reporting needs to be handled slightly differently.

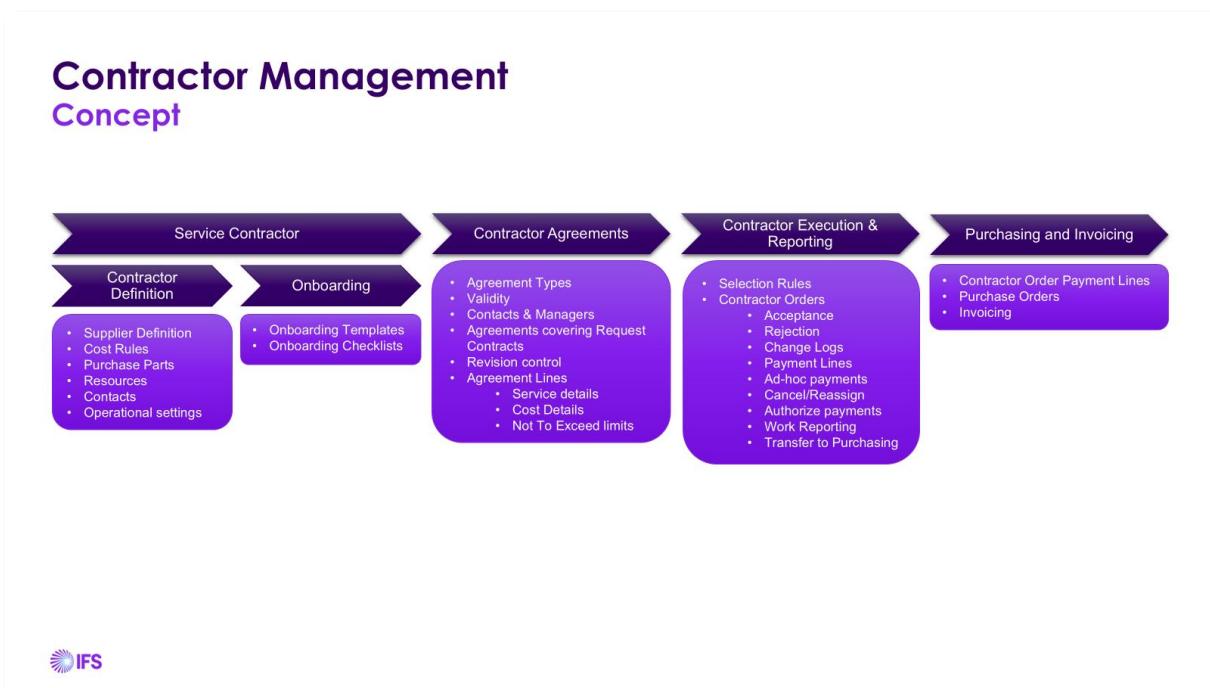
Concept (25R1↗)

Managing service contractors effectively is crucial for smooth operations and cost control. Many organizations face challenges in integrating contractors into workflows, ensuring compliance, and maintaining quality standards due to unclear processes or inadequate tools.

Service Contractor Management offers features to streamline contractor-related process. It connects contractors with suppliers, manages costs, views existing agreements, tracks resources, and organizes important contacts.

Benefits:

- A standardized process to define service contractors helps the organization identify its contractors, understand their roles, and allocate them to various requirements effectively.
- Managing supplier connections ensures collaboration, communication, and performance management are efficient. A well-maintained connection enhances service quality and supports long-term relationships with contractors.
- Having a comprehensive overview of each contractor, including resource capacity, contact information, and agreements, aids in making informed decisions, managing resources efficiently, and ensuring smooth project execution.

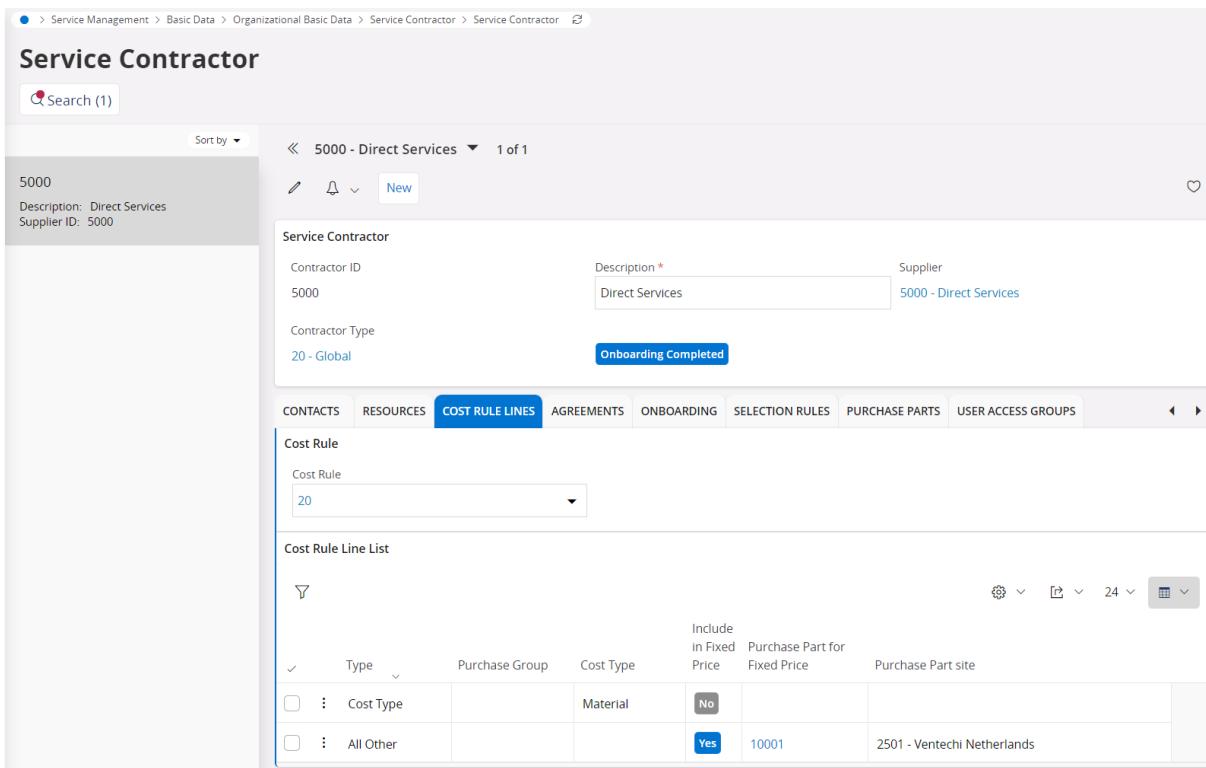


When work is awarded to a subcontractor, a Contractor Order is created, which holds payment lines that reflect the work the partner needs to carry out (or has carried out). It's the entity that captures what the contractor wants to get paid for. When a Contractor Order is created, it uses a Cost Rule (see [Contractor Creation \(25R1P\)](#)) to specify what the contractor gets paid e.g., a fixed price for the service and optionally the spare parts that were used.

Based on the Contractor Order a Purchase Order is created, which is the standard approach for buying services from an external party.

Contractor Creation (25R1P)

📁 [Service Management>Basic Data>Organizational Basic Data>Service Contractor>Service Contractors](#)



The screenshot shows the 'Service Contractor' creation screen. The contractor is named '5000 - Direct Services' with Supplier ID 5000. The 'Description' field is set to 'Direct Services'. The 'Supplier' field is also '5000 - Direct Services'. The 'Contractor Type' is '20 - Global' and the status is 'Onboarding Completed'. The 'COST RULE LINES' tab is active, displaying a table of cost rule line items:

Type	Purchase Group	Cost Type	Include in Fixed Price	Purchase Part for Fixed Price	Purchase Part site
Cost Type		Material	No		
All Other			Yes	10001	2501 - Ventechi Netherlands

When creating a new contractor, it can be associated to an existing supplier, it's also possible to create a new supplier. The selection of a Cost Rule and a Contractor Type (maintained at [Service Management>Basic Data>Organizational Basic Data>Service Contractor>Contractor Types](#)) is optional.

Connecting a supplier is **mandatory** for all downstream order management processes (i.e., contractor order, purchase order, integration with Finance). The main use case for subcontractors **without** connected supplier is for workforce management, where the focus is mainly on scheduling and contractor capacity management.

Note: Contractor Type and Supplier can only be specified during Contractor creation.

Contacts are only available when a supplier is connected. The list shows persons connected to the supplier, they can be added/deleted here or on the Supplier pages.

Resources lists bucket resources that were created based on this contractor. List rows can be expanded to show additional scheduling details.

The **Cost Rule** is applied when Contractor Orders are created. The *Cost Rule Lines* tab displays the specifics of the selected cost rule, indicating which cost types are paid separately and which are included in a fixed price. When choosing the applicable cost rule, the system first checks the Agreement Line, where pricing of individual services can be defined.

Service Management > Contract Management > Contractor Agreement > Agreement Line

Agreement Line

1
Agreement Name: Direct Services NL
Contractor ID: 5000
Contractor Name: Direct Services
Revision: 1
Cancelled

< Back

1 - Direct Services NL
Agreement Lines
1 - Installation services

Agreement Details

Agreement	1 - Direct Services NL	Agreement Type	Contractor
Valid From	1/1/2025	Valid To	12/31/2026

Line Details

Payment and Invoicing

Cost Rule	10 - Fixed price
-----------	------------------

Service Details

Service *	30 - Installation	Default Resource	2516 - Direct Services	Request Contract Line
-----------	-------------------	------------------	------------------------	-----------------------

FIXED COST DETAILS

Description	Purchase Part	Price	Currency	Site
Installation services	10001 - Subcontracting	200	EUR - euro	2501 - Ventechi Netherl...

If there is no match, the general Cost Rule on the Contractor is evaluated, which applies to all services. If there is still no match, the Service in the Service Catalog is checked.

Service Management > Basic Data > Service Work Basic Data > Service Work Catalog > Service Catalog

Service Catalog

Search (1)

20
Description: Corrective Maintenance
Service Type:
20 - Corrective Maintenance

Expand

Service ID

20	Description *	Corrective Maintenance
----	---------------	------------------------

Applicability

All	Service Type	Invoicing Process *
	20 - Corrective Maintenance	Normal

STANDARD TASKS **SERVICE ORGANIZATION** **PRICING** **CONTRACTING COSTS** **SLA** **URGENCY** **APPLICABILITY**

Cost Rule

Cost Rule	10 - Fixed price
-----------	------------------

Fixed Purchase Prices

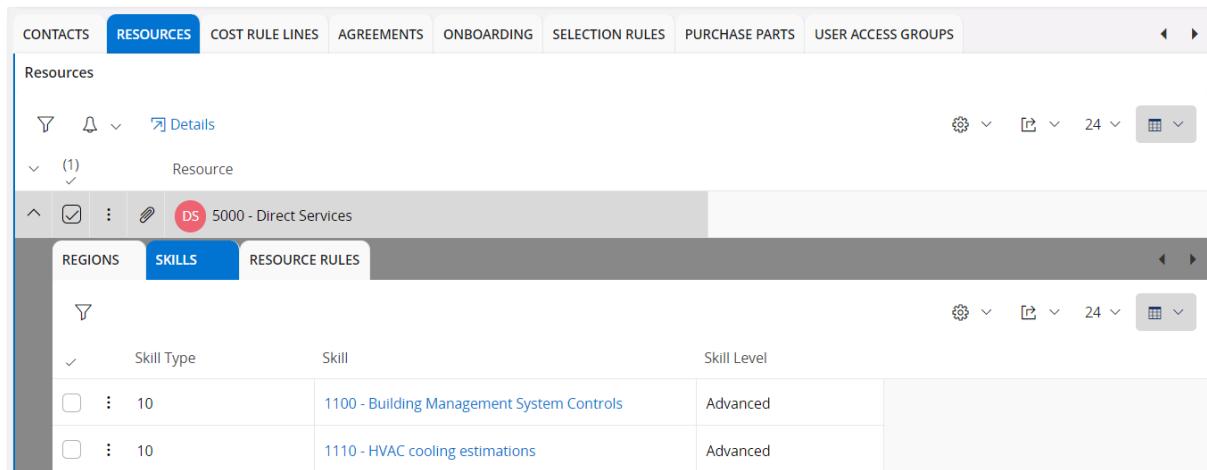
Line No	Site	Purchase Part No	Description	Purchase Amount
1	2501 - Ventechi Netherlands	10001	Subcontracting	

Resources shows the service resources of the contractor. This can be individual resource or bucket resources. Buckets do not have named members. Their purpose is to function as a “container” that accumulates activities based on the number of hours, frequency, or any other custom metric.

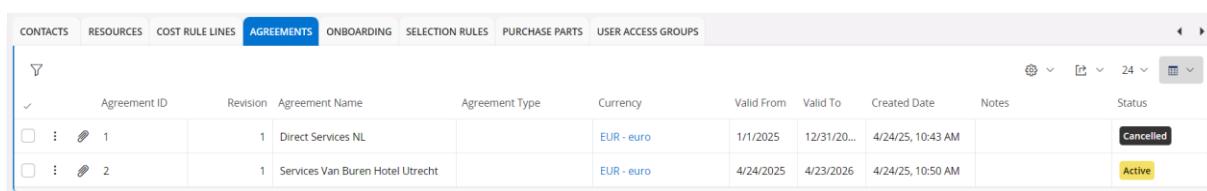
For instance, a Bucket Resource might be assigned up to 100 hours of work within one 8-hour shift. Alternatively, it could have an allocation of 20 activities per shift, irrespective of the shift's duration.

There are cases where multiple buckets could be used for a single contractor. An example would be a contractor that operates country-wide, and multiple buckets reflect the regional presence. This may be necessary because PSO doesn't consider travel time for bucket resources, however it does limit the range from the bucket location.

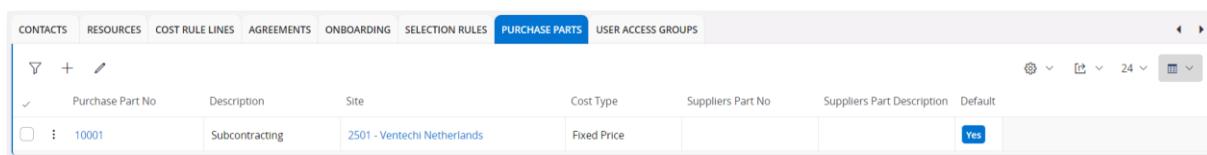
For more details, please refer to [Scheduling Demystified](#).



Agreements lists all Contractor Agreements with validity periods and current status.



Purchase Parts allows the contractor manager to specify Non-Inventory Purchase Parts of the Supplier connected to the Service Contractor. These can be used as Purchase Parts when reporting work and handling payments. For every Cost Type, one part can be defined as default. This is used when planning lines on the task are converted to payment lines on the Contractor Order. Price may be determined by the Contractor Agreement.



Contractor Agreements (25R1★)

Note: Agreement can only be used if the Service Contractor is connected to a supplier.

Managing contractor agreements is essential to keep track of the agreed scope of work that contractors can do on behalf of the service provider. A Service Contractor can have agreements that cover the full contract of a customer, parts of the contract, or just a few selected services. Agreements also manage the remuneration of the Service Contractor for work they have done.

Agreements define terms, conditions, and deliverables ensure all parties have a mutual understanding of the agreement. They can be defined for different contractor models and services to meet unique business needs. Revision handling keeps track of changes and ensures compliance with internal policies and external regulations.

Agreements share several similarities with Request Contracts. While a Request Contract specifies the terms and conditions for servicing a customer, an Agreement outlines the payment structure for subcontractors when executing services on behalf of the service provider. The Request Contract is utilized for generating Customer Orders and Invoices, whereas the Agreement is employed for Contractor Orders and Purchase Orders.

Service Management>Contract Management>Contractor Agreement>Contractor Agreement

Agreements can only be created for contractors associated to suppliers, from which they also fetch the currency. It is possible to associate the Agreement with a Request Contract.

Service Management > Contract Management > Contractor Agreement > New Contractor Agreement

New Contractor Agreement

General Details Select Contract Lines

Contractor Details	Currency	Default Resource
Contractor *	EUR - euro	5000 - Direct Services
Agreement Details	Agreement Type	
Agreement ID	Agreement Name *	NL20103 Customer Agreement
Connections	Request Contract *	
Connect to Request Contract	Request Contract	Customer
	RC20.197 - Van Buren Hotel Amsterdam-Amstel	NL20103 - Van Buren Hotel Amsterdam-Amstel
Validity	Select which Services to copy	
Service Organization *	Valid From *	Valid To *
2501 - Ventechi Netherlands	4/30/2025	4/23/2027
Responsibility	Contract Manager	
Contractor Contact	TISCNL - Tina Scheers	

< Previous Next > Finish Cancel

If **Select which Services to copy** is enabled, the next page allows the selection of relevant services from the Request Contract...

Service Management > Contract Management > Contractor Agreement > New Contractor Agreement

New Contractor Agreement

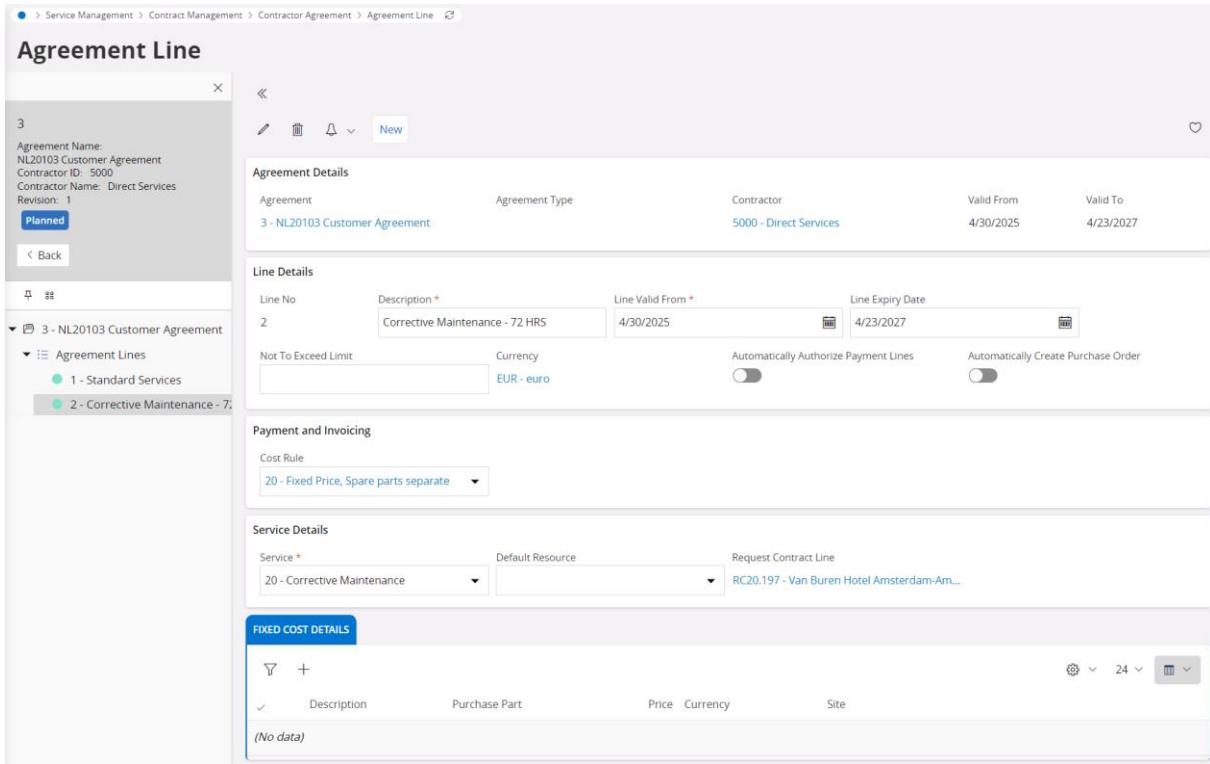
General Details Select Contract Lines

Select All Deselect All

Select	Line No	Description	Service	Valid From	Valid To
<input type="checkbox"/>	2	Standard Services	80 - Inspection	7/23/2024	4/23/2027
<input type="checkbox"/>	3	Corrective Maintenance - 72 HRS	20 - Corrective Maintenance	7/23/2024	4/23/2027

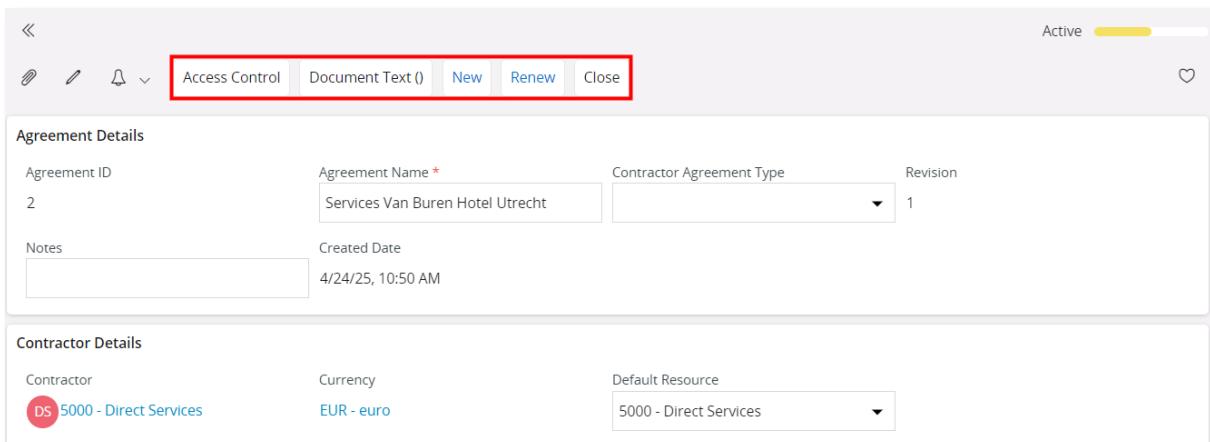
< Previous Next > Finish Cancel

...which will be copied into Agreement lines.



The **Not To Exceed Limit** is applied when authorizing payment lines. This authorization can be performed manually or automatically by enabling the **Automatically Authorize Payment Lines** toggle.

Access Control on the Agreement header uses Access Groups to grant contractor users permissions to the agreement (see also [Access Control](#)). This is currently utilized by APIs, and in a future release, the Subcontractor Portal will also use it.



Renew creates a new revision of the existing contract with a future validity date.

Contractor Onboarding (25R1★)

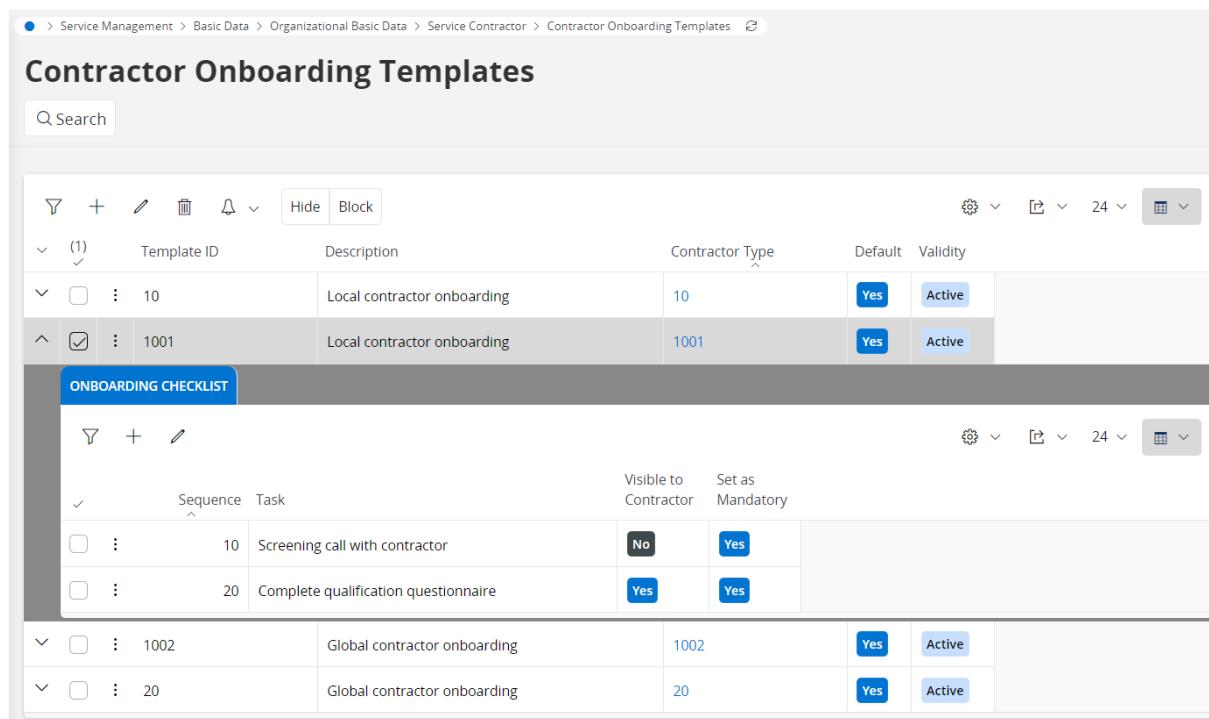
Note: Completed onboarding is a pre-requisite for being able to award work to that Service Contractor.

In today's dynamic business environment, many organizations depend on subcontractors to help meet their operational needs. However, bringing contractors on board can often be challenging. The onboarding process can be cumbersome and disorganized, leaving contractors to navigate unclear procedures with limited access to the information they need.

A standardized process to onboard service contractors helps ensure that they meet the same requirements before beginning work for the organization. Tailored onboarding templates and contractor type definitions ensure a personalized and relevant onboarding experience for each contractor. Onboarding checklists provide clear, step-by-step instructions for all stakeholders. Externally published onboarding checklist items ensure a transparent view of what's required before a contractor can begin work. Proper onboarding ensures that all necessary steps are completed and documented before work commences.

 [Service Management>Basic Data>Organizational Basic Data>Service Contractor>Contractor Onboarding Templates](#)

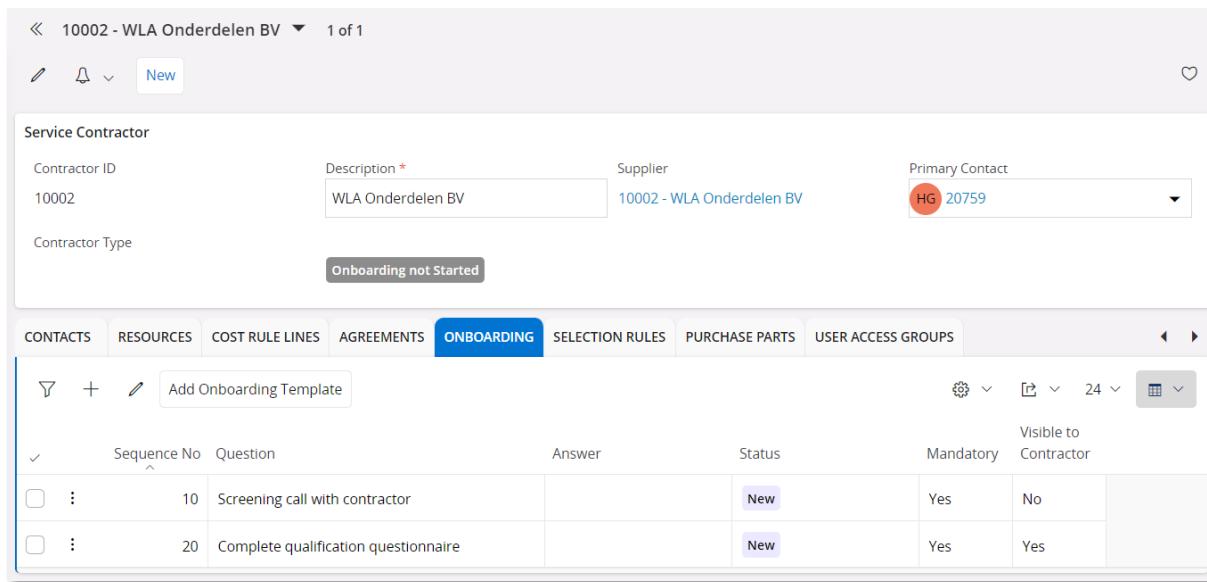
Onboarding templates are defined per contractor type, one template can be set as default.



Template ID	Description	Contractor Type	Default	Validity
10	Local contractor onboarding	10	Yes	Active
1001	Local contractor onboarding	1001	Yes	Active

Sequence	Task	Visible to Contractor	Set as Mandatory
10	Screening call with contractor	No	Yes
20	Complete qualification questionnaire	Yes	Yes

The template can be used to populate the *Onboarding* steps for a new contractor. These steps can be amended as needed.



Sequence No	Question	Answer	Status	Mandatory	Visible to Contractor
10	Screening call with contractor		New	Yes	No
20	Complete qualification questionnaire		New	Yes	Yes

When all steps are marked as Done, the contractor is flagged as “Onboarding Completed”.

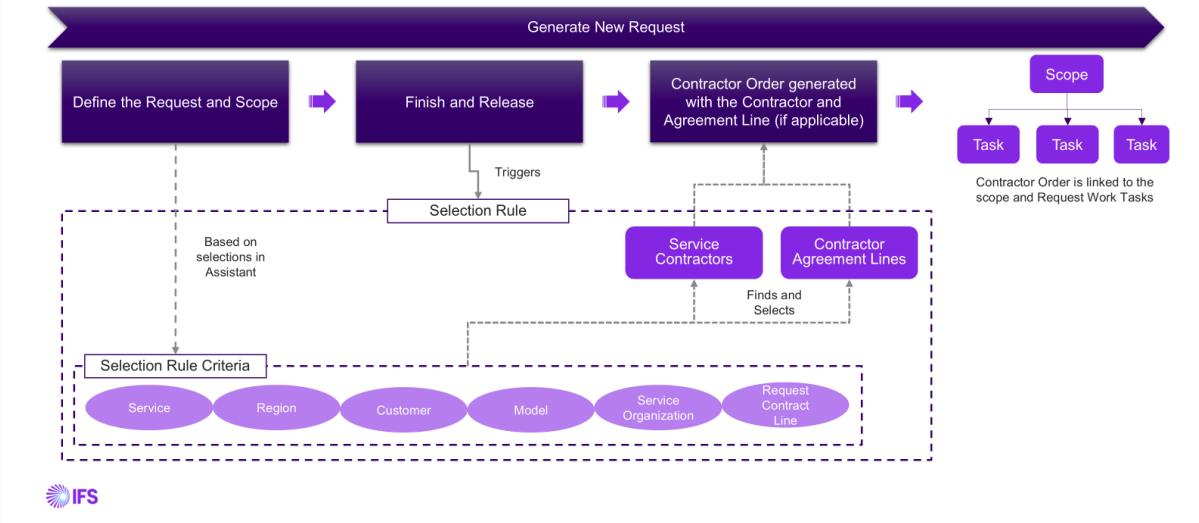
Contractor Selection Rules (25R1★)

Effectively managing contractor work is crucial for service providers that rely on external resources instead of in-house resources. However, many struggle with inconsistent selection processes, manual tracking challenges, and complex payment workflows. Without a standardized approach to execution and reporting, businesses can encounter inefficiencies, compliance issues, and financial inconsistencies.

By simplifying order management, automating the selection of service contractors, improving work tracking, ensuring accurate reporting, and automating payment authorizations, the process enhances efficiency while seamlessly integrating with procurement and financial workflows. Selection Rules ensure that the right contractor is assigned based on set criteria.

Work Reports and History Change logs provide visibility into progress and modifications. Reassignment, acceptance, and rejection workflows improve operational flexibility.

Contractor Management: Selection Rules Concept



Selection Rules for Service Contractors automate the process of assigning a Service Contractor to perform services when the Request is being released, instead of manually selecting the most suitable Service Contractor from a list and creating Contractor Orders. The rules also automate the selection of the Contractor Agreement line for the desired service onto the Contractor Orders.

Note: Selection Rules for Service Contractor complement the rules for Service Organizations. The Request is still owned by a Service Organization; in addition a contractor is assigned.

Service Management>Basic Data>General Basic Data>Selection Rule>Selection Rules

Selection Rules											
	Rule No		Rule Description	Rule for	Primary Selection	Additional Weight	Secondary Selection	Service Criteria	Region Criteria	Customer Criteria	Model Criteria
<input type="checkbox"/>	122		Installation work	Service Contractor	5000 - Direct Services		CA25.1100 - 3 - VTZSR I...	30 - Installation		 NL20103 - Van Bur... VTZSR - Ventechi-	
<input type="checkbox"/>	120		VTZSR Installations at ...	Service Contractor	10002 - WLA Onderdelen BV			30 - Installation	25 - Netherlands	 NL20103 - Van Bur... VTZSR - Ventechi-	

Selection Rules can also be maintained directly on the Service Contractor record.

<< 10002 - WLA Onderdelen BV ▼ 1 of 1

[New](#)

Service Contractor

Contractor ID 10002	Description * WLA Onderdelen BV	Supplier 10002 - WLA Onderdelen BV	Primary Contact HG 20759
Contractor Type	Onboarding Completed		

CONTACTS RESOURCES COST RULE LINES AGREEMENTS ONBOARDING **SELECTION RULES** PURCHASE PARTS USER ACCESS GROUPS

New

Rule No	Description	Contractor Agreement Line	Service Criteria	Region Criteria	Customer Criteria	Model Criteria	Service Organization Criteria	Request Contract Line Criteria
120	VTZSR Installations...	30 - Installation	25 - Netherlands	VB NL20103 - Van Buren Hotel ...	VTZSR - Ventec...	2501 - Ventechi Netherlands		

Once a Selection Rule was triggered, a Contractor Order is created, and the Request will show a "Subcontracted" badge on the header (same for the task header). The subcontractor will be visible in the Contractor Order. Without a rule, the Contractor Order needs to be created manually.

Request ID
16 Description *
Request with subcontractor Customer
 VB NL20103 - Van Buren Hotel Amsterdam-Amstel Primary Contact

Request Information

SLA Commitments Commitments Overdue on this Request	Customer Reference
Customer Order Type	Customer Order No Subcontracted

Location and Address

Region 25 - Netherlands	Location 913 - Joan Muyskenweg 20, NL
Address Joan Muyskenweg 20 Amsterdam, 1096 CJ NL - NETHERLANDS (THE) Open Map	

Classification

Ownership

SERVICES TASKS SLA PRICE SUMMARY CONTACTS SERVICE NOTES SURVEYS AND ANSWERS

Add to Open Invoice Previous... Service Organization Scope Status Connection Type Reported Item Customer Warranty

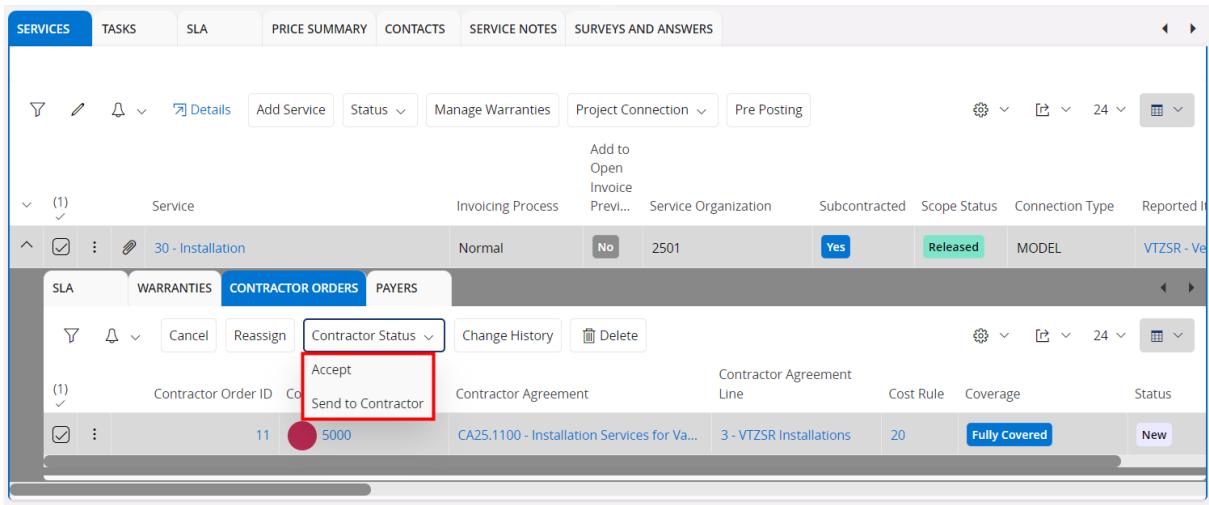
(1) Service Invoicing Process Normal No 2501 Released EQUIPMENT NLVTTZ2097 - Ventechi Z... Under Warranty

SLA WARRANTIES CONTRACTOR ORDERS PAYERS

Contractor Order ID Contractor Contractor Agreement Line Cost Rule Coverage Status

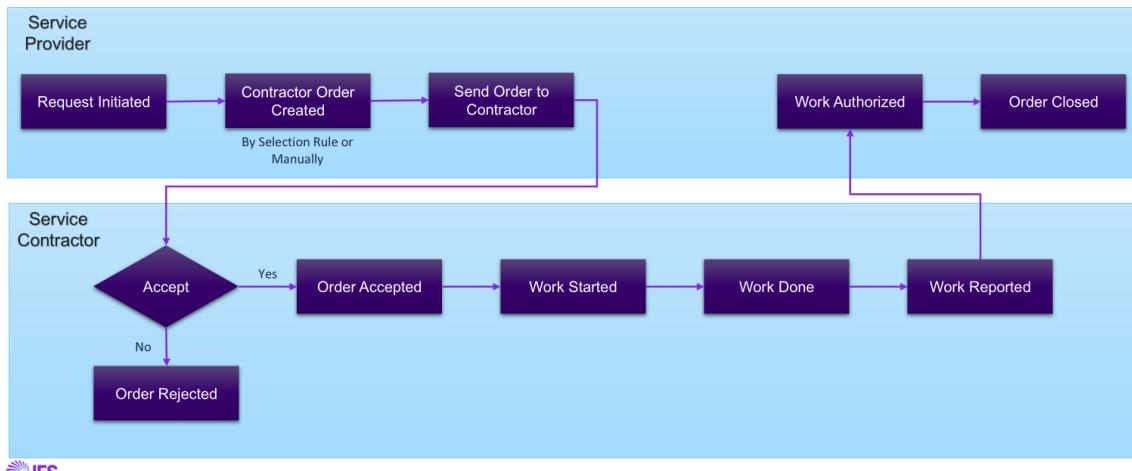
3 5000 2 - Services Van Buren Hotel Utrecht 1 - Standard Services 10 Fully Covered New

The Contractor Order can be accepted to send to the contractor. As of now this will only change the status, in a future release it will make the order available in the Subcontractor Portal.



Contractor Execution & Reporting (25R1★)

Contractor Management: Contractor Execution & Reporting Concept



Create Contractor Order on the Request header allows the selection of one or multiple scopes, for which individual Contractor Orders are created. **New Contractor Order** is available on the individual Scope/Service and will only create a Contractor Order for that specific Scope/Service.

Note: You can only select Service Contractors without onboarding requirements or whose onboarding was completed.

Service Management > Request Management > Request Handling > Request Details

Request

Search (1)

Sort by ▾

292

Description: Repair Request
Created: 6/5/25, 8:22 AM
Created By: TISCNL
Customer: NL20103
Source: Manual
Released

Request ID: 292 Description *: Repair Request Customer: NL20103 - Van Buren Hotel Amsterdam-Amstel Primary Contact: RE Rene Hogerhand

Request Information ▾ Location and Address ▾

Classification ▾ Ownership ▾

SERVICES **TASKS** **SLA** **PRICE SUMMARY** **CONTACTS** **SERVICE NOTES** **SURVEYS AND ANSWERS**

Details Edit Add Service Status Manage Warranties Project Connection Pre Posting

Add to Open Invoice Previous Scope Status Connection Type Reported Item Customer Warranty

(1) Service Invoicing Process No Released EQUIPMENT NLVTZ2097 - Ventechi Z... Under Warranty

SLA **WARRANTIES** **CONTRACTOR ORDERS** **PAYERS**

New Contractor Order

Contractor Order ID Contractor Contractor Agreement Line Cost Rule Currency Total Amount

(No data)

The Contractor Order is optionally connected to a Contractor Agreement line, which specifies the financial details. The Contractor Orders are listed under each Request Scope for review of which Service Contractor is assigned, with the applicable Cost Rule, and whether this Contractor will cover all or only selected work tasks under this scope. It also shows the status of the Contractor Order.

Request ID: 21 Description *: VTZSR Installation Customer: NL20103 - Van Buren Hotel Amsterdam-Amstel Primary Contact: RE Rene Hogerhand

Request Information SLA Commitments Customer Reference: No Active Commitments on this Request

Customer Order Type Customer Order No: **Subcontracted**

Location and Address Region: 25 - Netherlands Location: 913 - Joan Muyskenweg 20, NL

Address: Joan Muyskenweg 20, Amsterdam, 1096 QJ NL - NETHERLANDS (THE) Open Map

Classification ▾ Ownership ▾

SERVICES **TASKS** **SLA** **PRICE SUMMARY** **CONTACTS** **SERVICE NOTES** **SURVEYS AND ANSWERS**

Details Add Service Status Manage Warranties Project Connection Pre Posting

Add to Open Invoice Previous Scope Status Connection Type Reported Item Customer Warranty

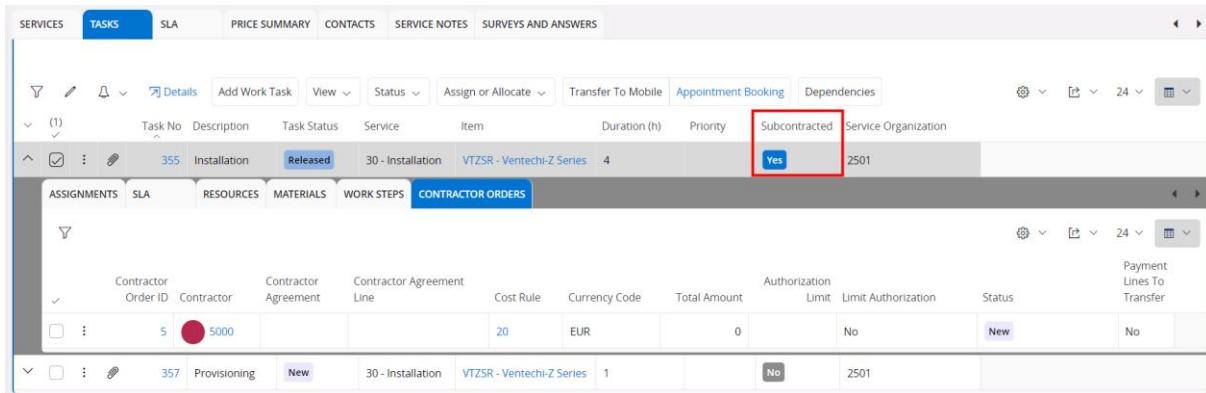
(1) Service Invoicing Process No 2501 Subcontracted Yes Released MODEL VTZSR - Ventechi-Z Series No Warranty

SLA **WARRANTIES** **CONTRACTOR ORDERS** **PAYERS**

Contractor Order ID Contractor Contractor Agreement Line Cost Rule Coverage Status

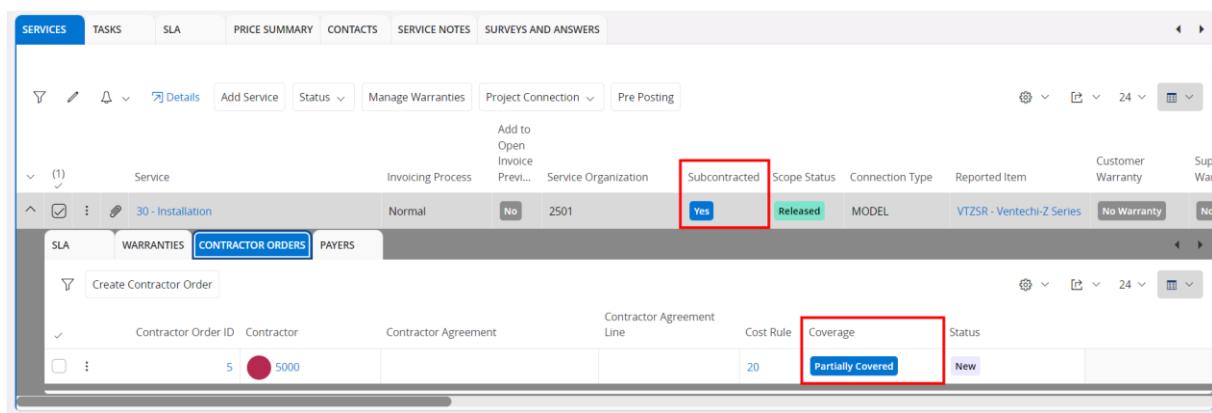
4 5000 CA25.1100 - Installation Services for Va... 3 - VTZSR Installations 20 Fully Covered New

Instead of subcontracting the entire scope, it is also possible to only award selected tasks to a subcontractor. This is done on the individual task...



The screenshot shows the IFS Cloud interface for managing tasks. A specific task record is displayed, with the 'Subcontracted' field highlighted by a red box. The value 'Yes' is selected in a dropdown menu. Other fields visible include Task No (355), Description (Installation), Task Status (Released), Service (VTZSR - Ventechi-Z Series), Item (4), Duration (h), Priority, and Service Organization (2501).

...and will be reflected on the Request.



The screenshot shows the IFS Cloud interface for managing requests. A specific request record is displayed, with the 'Subcontracted' field highlighted by a red box. The value 'Yes' is selected. Other fields visible include Service (30 - Installation), Invoicing Process (Normal), Service Organization (2501), Scope Status (Released), Connection Type (MODEL), and Customer Warranty (No Warranty). Below the main request view, a detailed table for a payment line shows the 'Coverage' field highlighted by a red box, with the value 'Partially Covered' selected. Other columns in the table include Contractor Order ID (5), Contractor (5000), Contractor Agreement Line, Cost Rule (20), and Status (New).

The Contractor Order holds payment lines that reflect the work the partner needs to carry out (or has carried out). It's the entity that captures what the contractor wants to get paid for. When a Contractor Order is created, it uses a Cost Rule (see [Contractor Creation \(25R1P\)](#)) to specify what the contractor gets paid e.g., a fixed price for the service and optionally the spare parts that were used.

Payment Lines on the Contractor Order is where the Contractor reports the work done and this is in turn the base for what the Contractor gets paid for. When a Contractor Order is created, Payment Lines are created based on Planning Lines from the included Request Work Tasks. If a fixed price model is used, a Payment Line is automatically created for the Fixed Cost. It is also possible to add Payment Lines ad-hoc for costs that were not planned originally on the Request Work Tasks. **Change History** logs all changes made to the individual Payment Lines.

● > Service Management > Request Management > Task Handling > Request Work Task

Request Work Task

Search (1)

Sort by ▾

645

Description: Inspection
Actual Item Description: VenTechi-Z Series

Released

Task Details

Task No	Task Description *	Created Date
645	Inspection	7/17/25, 4:19 ...

Long Description

Inspection	Request	Scope
317 - Insp...	320	

Invoicing Info

EUR	Subcontracted	- %
-----	---------------	-----

Item Details

Task Dates

Handling Information

Planning and Scheduling

RESOURCES ASSIGNMENTS WORK STEPS MATERIAL CONTRACTOR ORDERS PAYMENT LINES RETURNS SLA TIME REPORTS PLANNED COST AND SALES COSTS SALES

SERVICE NOTES SURVEYS AND ANSWERS

Contractor Order ID Line No Status Cost Type Task Plan Line No Purchase Part Purchase Price Discount % Invoice % Quantity Total Price Currency UoM Comments

15	3	New	Personnel	1372 - Normal Time	10001 - ...	200.00	0	100	1	200.00	pcs - piece ...
----	---	-----	-----------	--------------------	-------------	--------	---	-----	---	--------	-----------------

Contractor Purchasing & Invoicing (25R1★)

When purchasing services from a subcontractor/supplier, it is important to follow the standard processes for procurement as any other purchase of a service or goods. The purchase should be based on the reported items logged by the Service Contractor or by an agreed fixed price model. An authorization of the reported lines is also usually needed to initiate the purchase and invoicing flow.

Benefits include:

- Streamlines the payment process to the same standard as any other procurement form a supplier, ensuring contractors are compensated promptly based on defined cost rules.
- Allows the definition of multiple purchase parts per cost type, accommodating various pricing scenarios.
- Facilitates the creation of purchase orders and invoices based on completed work, reducing manual effort and errors.
- Detailed tracking and authorization of payment lines promote transparency and accountability.
- Provides contractors with a clear view of their payments for the work undertaken.
- Purchase Orders are used to receive Supplier Invoices from Contractors, with existing and established matching mechanisms for costs. This approach streamlines the administration involved in matching and authorizing payments for Supplier Invoices.

The **Contractor Orders** page ( Service Management>Contract Management>Contractor Orders) allow users to administrate all Contractor Orders with their related Request Work Tasks and Payment Lines.

Service Management > Contract Management > Contractor Orders

Contractor Orders

Search

Contractor Order ID	Request	Contractor	Contractor Agreement	Contractor Agreement Line	Cost Rule	Currency	Total Amount	Authorization Limit	Authorization Status	Status
15	317 - Inspection Services	NL-SC-0001 - WLA Onde...	CA-NL-SC-0001 - Service...	1 - Standard Services		EUR - euro	200		Not Authorized	New
PAYMENT LINES										
TASKS										
Contractor Order ID	Line No	Description	Task No	Status	Cost Type	Purchase Part	Purchase Price	Discount %	Invoice %	Quantity
15	3	645 - Inspection	New	Personnel	10001 - Subcontracting	200.00	0	100	1	

The intended process is for the contractor to review and confirm the payment lines once satisfied with their accuracy. Subsequently, provided they meet the established expectations, the service provider will **Confirm** and **Authorize** the confirmed payment lines and create a Purchase Order line that the Service Contractor can reference when sending the invoice. At the creation of the Purchase Order, the arrival of the Purchase Order is directly registered to make it ready for the upcoming Supplier Invoice.

Service Management > Contract Management > Contractor Orders

Contractor Orders

Search

Contractor Order ID	Request	Contractor	Contractor Agreement	Contractor Agreement Line	Cost Rule	Currency	Total Amount	Authorization Limit	Authorization Status	Status
15	317 - Inspection Services	NL-SC-0001 - WLA Onde...	CA-NL-SC-0001 - Service...	1 - Standard Services		EUR - euro	200		Not Authorized	Order Accepted
PAYMENT LINES										
TASKS										
Create Purchase Order	Change History									
Contractor Order ID	Line No	Description	Task No	Status	Cost Type	Purchase Part	Purchase Price	Discount %	Invoice %	Quantity
15	3	645 - Inspection	Authorized	Personnel	10001 - Subcontracting	200.00	0	100	1	200

Create Purchase Order (PO) uses the payment lines linked to the Contractor Order. One PO per payment line is possible, but it should rather be all payment lines going into one PO. The PO is received and closed automatically.

Procurement > Order > Purchase Order

Purchase Order

Search (1)

Order No	Supplier	Site	Order Code	Receipt Date
2	10002 - WLA Onderdelen BV	2501 - Ventechi Netherlands	1 - NORMAL	7/17/25, 5:00 PM

Not Shared

Order Amounts

Total Net Amount/Base	Total Net Amount/Curr	Total Tax Amount/Curr	Total Gross Amount/Curr
200.00 EUR	200.00 EUR	0.00 EUR	200.00 EUR

PART LINES	NO PART LINES	RENTAL PART LINES	ORDER DETAILS	CHARGES	LANDED COST	AUTHORIZATION
1						
Line No	Release No	Part No	Part Description	Quantity	Purch UoM	Planned Receipt Date
1	1	10001	Subcontracting	1	pcs	7/17/25, 5:00 PM
						Planned Arrival Date
						7/17/25, 12:00 AM
						Planned Delivery Date
						7/17/25, 12:00 AM
						Wanted Delivery Date

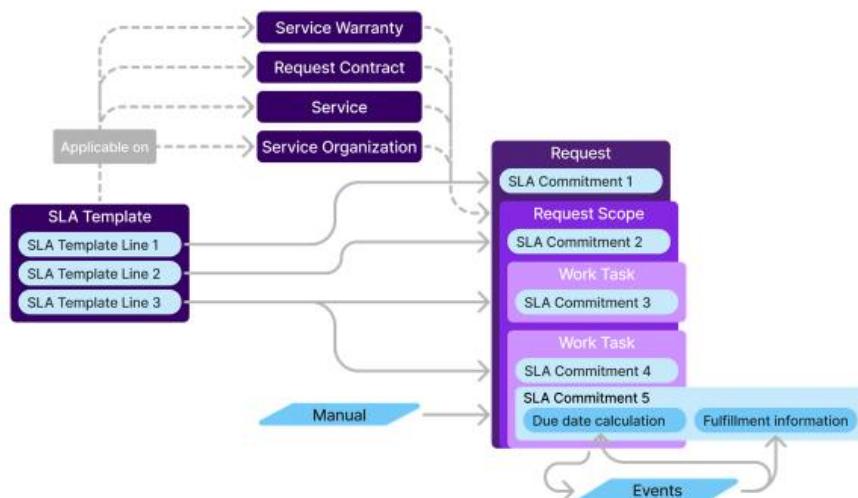
SLA Management

Concept

Service Level Agreements (SLAs) are an important part of Service and Workforce Management, to make sure that both customers and service providers are aligned in terms of obligations, standards of service, service quality as well as delivery expectations for different types of work. Having the ability to offer various types of SLAs with various fulfilment criteria is an important part of contract negotiations. SLA fulfilment is often measured to ensure the expected level of service is delivered.

SLA Management

Concept



SLA Templates with Template Lines can be created and applied to the entities:

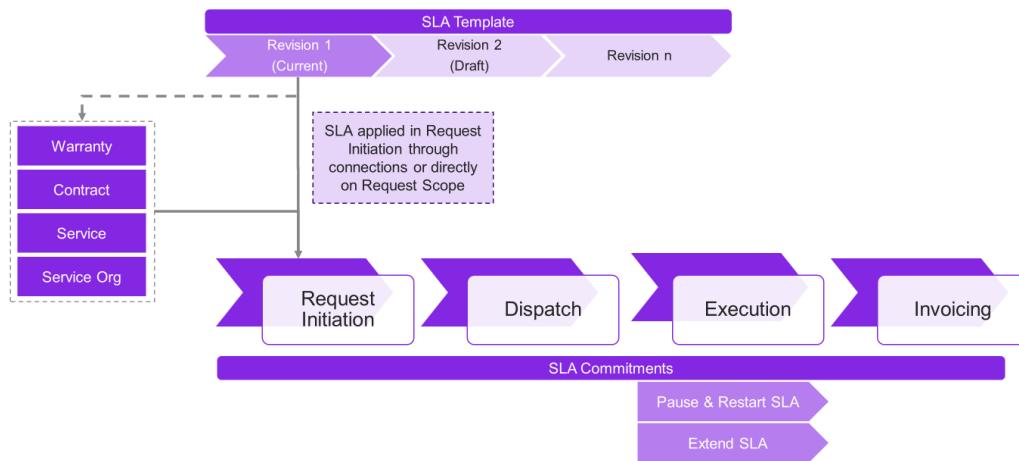
- Request Contract
- Service Warranty
- Service
- Service Organization

When an SLA Template is applied to a Request, the Template Lines become **SLA Commitments**. A Request/Scope/Work Task can have multiple SLA Commitments, and one SLA commitment can be applied to multiple work tasks.

SLA Commitments are fulfilled by **Events**. The SLA Due Date can be calculated using events in the Request process. For a changed service offering, the ability to change the offered SLA and manage the changed offered SLA in a more structured way is required.

During the service process, there may be instances when the customer or the equipment requiring service is not present at the designated location. To address these situations, it is necessary to have the capability to pause an SLA in accordance with mutually agreed upon service delivery terms and to reactivate it once the appropriate conditions for performing the service are met.

SLA Management Concept



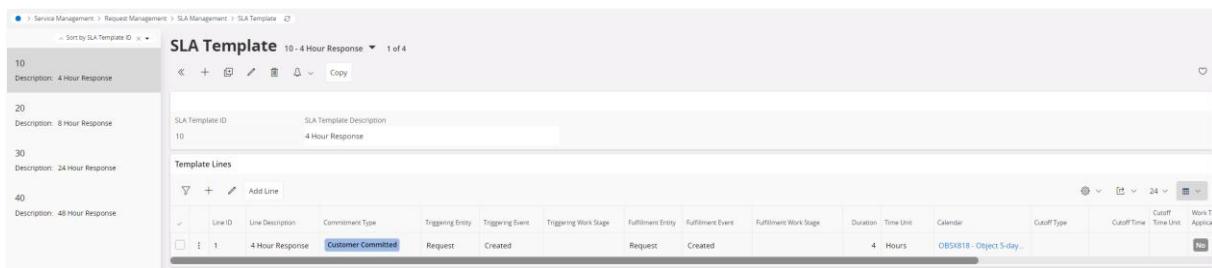
Benefits of the enhanced SLA management include:

- Enhanced structure of historical and current offered SLAs through revision handling.
- Possibility to fix a specific revision of an SLA for Request Contracts and Warranties.
- API-controlled commitment changes to pause, restart or extend individual SLA commitments.
- Ability to control the scheduling target for Bundle Tasks with SLA Commitments.
- Increased visualization of SLA Commitments within a Request.

Define SLA Templates (25R1)

 *Service Management>Request Management>SLA Management>SLA Template*

SLA Templates can be used to automate the creation of SLA Commitments on Request, Request Scopes, and Work Tasks and allow the efficient administration of standard SLAs.



Field	Explanation
Commitment Type	Indicates if the SLA Commitment is Customer Committed or if it's used Internal only e.g., to ensure that a Request is invoiced within a certain time period.

Field	Explanation
Triggering Entity	Defines the Entity triggering the Due Date calculation of the SLA Commitment (created from the template line). Valid entities are Request , Scope , and Task .
Triggering Event	The Event triggering the Due Date calculation. Example: Request or Request Scope changes its status to Released.
Triggering Work Stage	Only supported for Triggering Entity= Scope and Triggering Event= Work Stage Started or Work Stage Completed . The Work Stage whose start/completion triggers the SLA.
Fulfillment Entity	The entity that is used to fulfill the SLA Commitment. Supported entities are Request , Scope , and Task .
Fulfillment Event	When an event matching the Fulfillment Event on the Fulfillment Entity is triggered, the SLA Fulfillment Date will be set. Example: Request or Request Scope changes its status to Completed.
Fulfillment Work Stage	Only supported for Fulfillment Entity= Scope and Fulfillment Event= Work Stage Started or Work Stage Completed . The Work Stage whose start/completion fulfills the SLA.
Duration, Time Unit, Calendar	The Duration is used together with the Time Unit to define the time between the Start Date and the Due Date of the SLA Commitment created from the template line. Only working time defined in the Calendar is considered.
(25R1) Cutoff Type, Cutoff Time, Time Unit	<p>Same Day allows the definition of SLAs due at the end of the current business day.</p>
(25R1)	<p>Cutoff Type can be left blank or set to Time or Next Day.</p> <p>If Time is selected, Cutoff Time and Time Unit allow the user to manually define the remaining time of a business day that will be ignored when calculating the Due Date. Example: Business day ends at 17:00, Cutoff Time is 1 hour, Triggering Event occurs at 16:02. The Due Date will be calculated starting from the next business day.</p> <p>If Next Day is selected, the calculation of the Due Date will always start from the next business day without considering the remaining time of the day the Triggering Event occurred.</p> <p>If Time Unit=Same Day and Cutoff Type=blank, the SLA will end at the end of the calendar's business hours.</p> <p>If Time Unit=Same Day and Cutoff Type=Time, the system will check the remaining business hours. Example: Business day ends at 17:00, Cutoff Time is 1 hour, Triggering Event occurs at 15:58. SLA will end at 17:00 on the same day. If the Triggering Event occurs at 16:02, SLA will end at 17:00 on the next business day.</p> <p>If left blank and Time Unit is NOT Same Day, the functionality is disabled.</p>
Work Task Applicable	Specifies if the resulting SLA Commitment is to be used as a time constraint on work tasks when scheduling them. When activated, the section for Scheduling Criteria will be displayed where a Scheduling SLA Type can be selected.

Field	Explanation
Scheduling SLA Type	<p>Specifies the Scheduling SLA Type that will be connected to the SLA Commitment created from the template line. Each Scheduling SLA Type defines the SLA curve shape used by PSO.</p> <p> Service Management>Basic Data>Service Work Basic Data>Service Scheduling Basic Data>Scheduling Basic Data>Scheduling SLA Types</p>
Start Based	<p>Defines whether just the start of the Work Task using the SLA Commitment must be within the defined SLA period or if the entire Work Task must be completed within the SLA period.</p> <p>Yes: Allocation has to start within the SLA period e.g., if the SLA expires at 17:00, it is enough for the Work Task to be scheduled at 16:59 to still adhere to the SLA Commitment.</p> <p>No: Allocation must be scheduled so that the work can be completed before 17:00.</p>
Task Sub Group, Task Sub Group Value	<p>Defines that the SLA Template Lines should only be applied to specific groups of Work Tasks. When set to Work Stage, the Task Sub Group Value should be set to a Work Stage.</p> <p>If a Task Sub Group is defined and the SLA Template is applied to a Request Scope, only the Work Tasks with the matching Task Sub Group Value (Work Stage) will have the SLA Commitment created. If the Task Sub Group is None, the SLA Line is applicable for all Work Tasks created under the Request Scope the SLA Template line is applied to. If the Task Sub Group is Work Stage, the Scheduling SLA Template Lines will only be applicable for Work Tasks with the specified Work Stage value.</p>

SLA Templates can be used on

- Customer Warranty Templates
- Request Contract Line SLA
- Request Contract Line Urgency
- Service Catalog SLA
- Service Catalog Urgency
- Service Organization SLA

SLA Template Revision Handling

You can create SLA Template revisions to change the requirements for the SLA you are offering. This lets you keep track of changes to SLA Templates and their different revisions without affecting existing structures. This also helps you to keep proper documentation and version control of SLAs, including revision history.

Specific revisions of an SLA template can be connected to Request Contract Lines and Service Object Warranties. This means that some contracts and warranties can use a certain revision even if there is a newer revision available.

Use **Revision Handling>New Revision** to create a new revision of an SLA Template.

Service Management > Request Management > SLA Management > SLA Template

Sort by ▾

SLA Template 48H-FIX-TIME - 48 hours fix time 1 of 1

48H-FIX-TIME
Description: 48 hours fix time
Revision: 1
Current

< + ⌂ ⌂ Copy Revision Handling ▾ New Revision

SLA Template ID	SLA Template Description	Revision	Valid From
48H-FIX-TIME	48 hours fix time	1	3/14/24, 6:19 PM Current

TEMPLATE LINES USED BY REVISIONS

Line ID	Line Description	Commitment Type	Triggering Entity	Triggering Event	Fulfillment Event	Duration	Time Unit
36H SCOPE CO...	48 h until scope completed	Internal Only	Scope	Created	Completed	48	Hours
36H WORK START	32 h until work started	Customer Committed	Task	Released	Work Started	28	Hours
48H FIX TIME	48 h until work done	Customer Committed	Task	Work Started	Work Done	16	Hours
4H RESPONSE	4 h response time	Customer Committed	Request	Created	Released	4	Hours
7BD TO CLOSE	7 business days to close	Internal Only	Request	Completed	Closed	7	Business D

Use **Revision Handling>Set as Current** to activate a draft SLA Template either effective immediately or from a future date.



Service Catalog, Service Organization, and Service Warranty Template will always use the current revision of the SLA Template. On the Request Contract line, it is possible to select the desired revision. If no revision is selected, the current revision will always be used. This also applies to the SLA Template selected for different Urgencies and for the SLA Template selected under *Service Object Warranty*.

Show Revision History displays a list of changes that have been done to the SLA Template.

The screenshot shows the 'Contract Line' configuration screen in the IFS Cloud Service Management module. The 'SLA' tab is active. In the 'SLA Template' section, there is a dropdown menu set to 'MJB-48HR-RESP - 48 Hour Response' with a revision of '2 - 48 Hour Response'. A red box highlights this area. Below this are sections for 'Template Lines' and 'Sla Template Revision List', each containing a table with columns like Line ID, Description, Commitment Type, and Status.

Apply SLA Templates

SLA Templates with Template Lines can be created and applied to the entities:

- Service Object Warranties
- Request Contract Lines
- Specific Urgencies
- Services
- Service Organizations

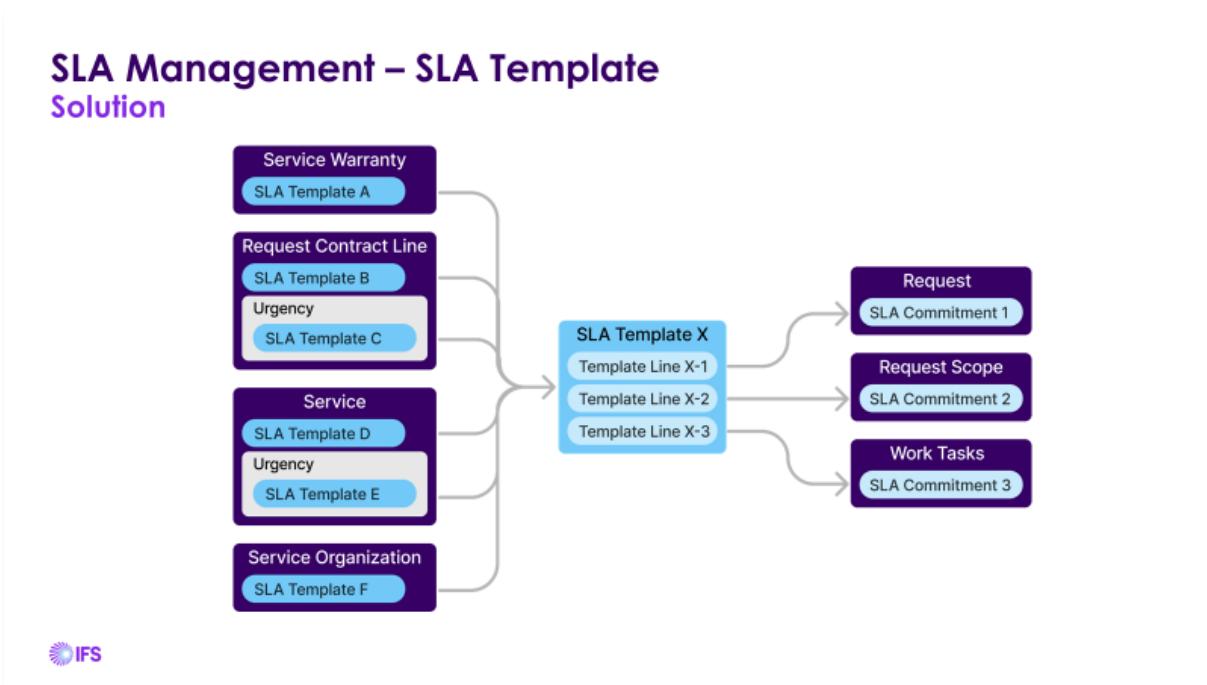
If no SLA Template is connected to any of the above for the request, an SLA Template can be added after Request creation by selecting **Edit** on the Request Scope. Note that this will always use the current revision of the SLA Template.

The screenshot shows the 'REQUEST SCOPE' screen. The 'SLA' tab is selected. In the 'SLA Template' column, there is a dropdown menu with a red box highlighting it. The dropdown shows 'New' and '2 - TELECOM REACTIVE'.

The applicable SLA Template is found based on following descending priority order:

- Warranty
- Contract Line Urgency
- Contract Line
- Service Urgency
- Service
- Service Organization

Each SLA Template line results in one or many SLA Commitments on the specified Fulfillment Entity.

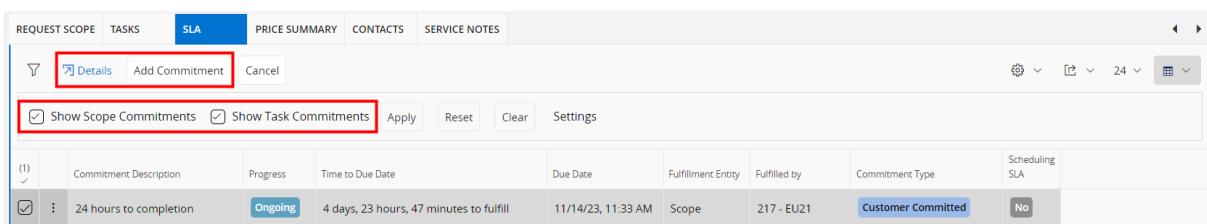


SLA Commitments

SLA Commitments provide flexibility when defining SLA Commitments in the Request process. They can use events to calculate SLA Due Dates and fulfill SLA commitments. SLA Commitments can be created:

- automatically from an SLA Template,
- manually using **Add Commitment** on the entity's **SLA** tab,
- automatically through integration/BPA, see [SLA Management APIs](#).

SLA Commitments are displayed on the entity's **SLA** tab. While this usually shows the SLA Commitments directly associated to the entity, the Request **SLA** tab can also **Show Scope Commitments** and **Show Task Commitments**.



The screenshot shows the SLA tab in the IFS Cloud interface. At the top, there are tabs for REQUEST SCOPE, TASKS, SLA, PRICE SUMMARY, CONTACTS, and SERVICE NOTES. The SLA tab is selected. Below the tabs, there are buttons for Details, Add Commitment, and Cancel. There are also checkboxes for Show Scope Commitments and Show Task Commitments, both of which are checked. Below these are buttons for Apply, Reset, Clear, and Settings. The main area displays a table of SLA Commitments. The first row shows a commitment with the description "24 hours to completion", status "Ongoing", progress "4 days, 23 hours, 47 minutes to fulfill", due date "11/14/23, 11:33 AM", fulfillment entity "Scope", fulfilled by "217 - EU21", commitment type "Customer Committed", and scheduling SLA "No".

Details shows all the elements of the SLA Commitment.

Service Management > Request Management > SLA Management > SLA Commitment

Commitment Details												
Commitment No	Commitment Description	Source	Progress	Commitment Type								
250	Response Time	Service	Overdue	Customer Commitment								
Request	Customer	Exceeded Reason		SLA Template								
99 - Measurement test for 2096	NL123596 - Fam. Nikkelen			30 - Response Time								
Commitment Basis												
Time to Due Date	Original Due Date	Due Date										
1 days, 0 hours, 2 minutes overdue	11/8/23, 11:50 AM	11/8/23, 11:50 AM										
Configuration												
<input checked="" type="radio"/> From Date												
<input type="radio"/> To Date												
<input type="radio"/> From Event												
Start Date	Duration	Time Unit	Calendar									
11/3/23, 11:50 AM	24	Hours	* - Default calendar									
Fulfillment Criteria												
Fulfillment Entity	Fulfillment Entity Reference	Fulfillment Event										
Scope	107 - EU21	Started										
Work Task Applicability												
Scheduling SLA Type	Start Based											
PRIMARY - Primary SLA	Yes											
Applied To												
<table border="1"> <thead> <tr> <th>Work Task</th> <th>Status</th> <th>Work Stage</th> <th>Scope ID</th> </tr> </thead> <tbody> <tr> <td>97 - Corrective Maintenance</td> <td>Released</td> <td></td> <td>107</td> </tr> </tbody> </table>					Work Task	Status	Work Stage	Scope ID	97 - Corrective Maintenance	Released		107
Work Task	Status	Work Stage	Scope ID									
97 - Corrective Maintenance	Released		107									

Commitment Details shows the calculated due dates.

Commitment Basis is what the calculation starts off:

- **From Date:** Start date is specified. Due Date is calculated from the start date based on the duration, time unit, and calendar.
- **To Date:** The Due Date is set to a specific date and time e.g., a deadline of the SLA Commitment. The start date will be set as the commitment creation date.
- **From Event:** The Due Date is calculated from when a Starting Event occurs. A duration, a duration unit, and a calendar must be defined. This option also allows to set up a Cutoff Type.

Fulfillment Criteria specifies what the Commitment is fulfilled by (e.g., start work can fulfill a commitment “Technician onsite in 8 hours.”).

Work Task Applicability specifies the Scheduling SLA Type that is connected to the SLA Commitment. The Scheduling SLA Type defines the SLA curve shape used by PSO. See [SLA Commitments for Scheduling](#).

Active Commitments are also indicated on the *Request* page and the *Request Task* page.

Request 141 - Routine visit to check up the equipment and make minor adjustment if and when needed ▾ Released

« ⌂ 8 ⌁ ⌂ New Edit Location Request - Cost and Sales Appointment Booking ⌂

Request ID 141	Description Routine visit to check up the equipme...	Customer SP IT200037 - Sig. Piero Bergamo	Primary Contact PI Piero Bergamo
-------------------	---	--	-------------------------------------

Request Information

Contract
[RC80.137 - Sig. Piero Bergamo](#)

SLA Commitments
[Active Commitment\(s\)](#)

Customer Reference

Location and Address

Location
[259 - Via Andrea Palladio, IT](#)

Address
Via Andrea Palladio
20135 - Milano
IT - ITALY

[Open Map](#)

The hyperlink navigates the user to the *SLA Commitments* page shown above, clicking the icon opens a small popup with Commitment Description, Progress and Due Date.

Request Information

Contract
[RC80.137 - Sig. Piero Bergamo](#)

Customer Reference

Classification

Urgency

SLA Commitments

SLA Commitments		
Commitment Description	Progress	Due Date
Resolved	Ongoing	11/24/23, 11:34 AM

SLAs on Bundle Tasks

Bundle Tasks provide two options: An SLA Commitment can be created directly for the Bundle Task or an SLA can be connected to the Bundle Task based on the SLAs available for the included Work Tasks:

- When releasing a Bundle Task, the SLA with the nearest due date will be connected as the SLA for the Bundle Task.
- The SLA that will be automatically connected to the Bundle Task must have a Scheduling SLA Type set.
- Additional SLAs can be connected to the bundle task by selecting from the SLAs of the included Work Tasks to extend the scheduling window further.

Add Commitment creates a Commitment directly for the Bundle Task, this does not affect the included Request Tasks. If the included Work Tasks have SLA Commitments with a Scheduling SLA Type, then these SLA Commitments can be connected to the Bundle Task using **Connect Commitment**.

Request Bundle Task 3496 - Metre Changes ▾

« ⌂ ⌂ ⌂ ⌂ ⌂ ⌂ ⌂ Reporting ▾ Status ▾ Edit Location Assign Work Unbundle Issue (1) Return to Inventory (0) Access Control

General Information		Location and Address																								
Bundle Task No	Description	Long Description																								
3496	Metre Changes																									
Transferred to Mobile		Location																								
Yes		WFM029 - STATIONSGATAN 6																								
		Address																								
		STATIONSGATAN 6 19540 MARSTA																								
Handling Information																										
Service Organization	Service Delivery Unit	Scheduling Dataset																								
WFM - WFM	WFM - WFM	WFM - WFM																								
Task Dates																										
SLA Commitments	Duration (h)	Planned Start																								
No Active Commitments	4	2024-02-01 08:00																								
Fixed Start	Actual Start	Actual Finish																								
WORK TASKS RESOURCES ASSIGNMENTS SLA SCHEDULING INFO SUMMARY																										
Connect Commitment Add Commitment																										
<table border="1"> <thead> <tr> <th>✓</th> <th>Commitment No</th> <th>Commitment Description</th> <th>Progress</th> <th>Due Date</th> <th>Scheduling SLA Type</th> <th>Commitment Type</th> <th>Time To Due Date</th> <th>Used for Scheduling</th> <th>Status</th> <th>Start Date</th> <th>Origine</th> </tr> </thead> <tbody> <tr> <td colspan="12">(No data)</td> </tr> </tbody> </table>			✓	Commitment No	Commitment Description	Progress	Due Date	Scheduling SLA Type	Commitment Type	Time To Due Date	Used for Scheduling	Status	Start Date	Origine	(No data)											
✓	Commitment No	Commitment Description	Progress	Due Date	Scheduling SLA Type	Commitment Type	Time To Due Date	Used for Scheduling	Status	Start Date	Origine															
(No data)																										
Attachments																										

The panel displays the applicable commitments...

X Connect SLA Commitment

(2)	Commitment No	Commitment Description	Progress	Due Date	Scheduling SLA Type	Commitment Type
<input checked="" type="checkbox"/>	1216	Work Started within 12 Hours.	Ongoing	3/26/24, 8:10 AM	PRIMARY1.T1 - Primary1 flat scheduling type for T1	Customer Committed
<input checked="" type="checkbox"/>	1213	Finished within 8 Hours.	Ongoing	3/25/24, 1:09 PM	SECONDARY1.T1 - Secondary2 medium scheduling type fo...	Customer Committed

OK Cancel

...which will then be connected to the Bundle Task.

Request Bundle Task 8866 - Bundle Task 1 of 1

New

General Information

Bundle Task No	Description
8866	Bundle Task

Long Description

Transferred to Mobile

No

Location and Address

Location

Address

Open Map

Handling Information

Task Dates

WORK TASKS RESOURCES ASSIGNMENTS SLA SCHEDULING INFO SUMMARY

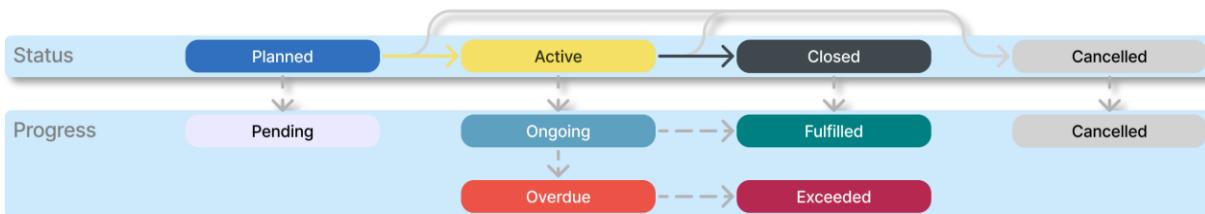
Connect Commitment

Commitment No	Commitment Description	Progress	Due Date	Scheduling SLA Type	Commitment Type	Time To Due Date	Scheduling SLA	Status	Start Date	Original Due Date	Exceeded Re...
1213	Finished within 8 Hours.	Ongoing	3/25/24, 1:09 PM	SECONDARY1.T1 - Seco...	Customer Committed	2 days, 23 hours, 47 mi...	Yes	Active	3/22/24, 1:09 PM	3/25/24, 1:09 PM	
1216	Work Started within 12 ...	Ongoing	3/26/24, 8:10 AM	PRIMARY1.T1 - Primary...	Customer Committed	3 days, 18 hours, 48 mi...	Yes	Active	3/22/24, 1:10 PM	3/26/24, 8:10 AM	

SLA Commitment Status and Progress

SLA Commitments have a **Status** and a **Progress** indicator. Status indicating the state, and progress provides more detailed information about that state. Depending on the state, the progress is affected:

- When the status is **Active**, the progress can either be **Ongoing** or **Overdue**.
- When the status is **Closed**, the progress can either be **Fulfilled** or **Exceeded** depending on whether the progress was Ongoing or Overdue when it got closed.



SLA Commitments for Scheduling

When the SLA Commitment has an associated Scheduling SLA Type, it will be considered for Scheduling...

Work Task Applicability

Scheduling SLA Type: PRIMARY - Primary SLA

Start Based: Yes

Applied To

Work Task	Status	Work Stage	Scope ID
137 - Inspection	Released		152

...otherwise the system will use the **Default Scheduling SLA Type** from the Scheduling Dataset.

Scheduling Dataset 10 - Sweden (PSO) ▾

« + 🖍️ 🔔 ⚙️

Deactivate Dataset Send Full Load Send Changes Send Reset Scheduling Optimization Datasets View Background Jobs View Application Messages

Dataset ID 10	Description Sweden (PSO)	Scheduling Method Automated												
Modelling Dataset ... Enabled <input checked="" type="button"/> Yes														
Input Reference														
Work Task <table border="1"> <tr> <td>Default Scheduling Activity Type 70</td> <td>Maximum Base Value per Hour 100000</td> <td>Default Primary Scheduling SLA Type PRIMARY</td> <td>Default Secondary Scheduling SLA Type SECONDARY</td> </tr> <tr> <td>Appointment Scheduling SLA Type APPOINTMENT</td> <td>Do on Location Incentive</td> <td>Plannable Task Type</td> <td>Schedule from Work Task Status</td> </tr> <tr> <td>Schedule from Request Work task Status</td> <td>Released</td> <td>Request Work Tasks</td> <td>Released</td> </tr> </table>			Default Scheduling Activity Type 70	Maximum Base Value per Hour 100000	Default Primary Scheduling SLA Type PRIMARY	Default Secondary Scheduling SLA Type SECONDARY	Appointment Scheduling SLA Type APPOINTMENT	Do on Location Incentive	Plannable Task Type	Schedule from Work Task Status	Schedule from Request Work task Status	Released	Request Work Tasks	Released
Default Scheduling Activity Type 70	Maximum Base Value per Hour 100000	Default Primary Scheduling SLA Type PRIMARY	Default Secondary Scheduling SLA Type SECONDARY											
Appointment Scheduling SLA Type APPOINTMENT	Do on Location Incentive	Plannable Task Type	Schedule from Work Task Status											
Schedule from Request Work task Status	Released	Request Work Tasks	Released											

It is possible to use multiple Scheduling SLAs on a Request Task.

Service Management > Request Management > Scheduling and Allocation > Request Work Task - Scheduling and Allocation

Sort by ▾

Request Work Task - Scheduling and Allocation

15969 - AC Repair Task 01 ▾ 1 of 1

Description: AC Repair Task 01
Actual Item Description:

Work Started

Task No	Description	Created Date
15969	AC Repair Task 01	9/9/23, 9:37 AM

Long Description	Request	Scope
AC Repair Task 01	2893 - Test	3568

Dependencies	Customer
	C1 1000 - Customer 1000

Appointment Booking

Appointment Mode	Appointment Start	Appointment Completion
------------------	-------------------	------------------------

Scheduling Constraints

SLA Commitments
No Active Commitments

Planned Start	Planned Finish	Fixed Start	Exclude from Scheduling
9/3/23, 2:00 AM	9/24/23, 10:00 AM		<input checked="" type="checkbox"/>

Duration Override	Allow Multiple Visits	Interrupt
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

SCHEDULING INFO

SLA	SCHEDULING INFO	RESOURCES	ASSIGNMENTS																														
Scheduling SLA Types																																	
<table border="1"> <thead> <tr> <th colspan="2">Scheduling SLA Type</th> <th>Description</th> <th>Primary</th> <th>Start Date</th> <th>End Date</th> </tr> </thead> <tbody> <tr> <td><input checked="" type="checkbox"/></td> <td>SECONDARY1.J11</td> <td>SECONDARY1.J11</td> <td>Yes</td> <td>9/9/23, 9:39 AM</td> <td>9/11/23, 11:00 AM</td> </tr> <tr> <td><input type="checkbox"/></td> <td>PRIMARY1.0AO</td> <td>PRIMARY1.0AO</td> <td>No</td> <td>9/11/23, 11:00 AM</td> <td>9/11/23, 2:00 PM</td> </tr> <tr> <td><input type="checkbox"/></td> <td>PRIMARY1.0AO</td> <td>PRIMARY1.0AO</td> <td>No</td> <td>9/11/23, 2:00 PM</td> <td>9/11/23, 2:00 PM</td> </tr> <tr> <td><input type="checkbox"/></td> <td>SECONDARY1.0AO</td> <td>SECONDARY1.0AO</td> <td>No</td> <td>9/11/23, 2:00 PM</td> <td>9/11/23, 3:00 PM</td> </tr> </tbody> </table>				Scheduling SLA Type		Description	Primary	Start Date	End Date	<input checked="" type="checkbox"/>	SECONDARY1.J11	SECONDARY1.J11	Yes	9/9/23, 9:39 AM	9/11/23, 11:00 AM	<input type="checkbox"/>	PRIMARY1.0AO	PRIMARY1.0AO	No	9/11/23, 11:00 AM	9/11/23, 2:00 PM	<input type="checkbox"/>	PRIMARY1.0AO	PRIMARY1.0AO	No	9/11/23, 2:00 PM	9/11/23, 2:00 PM	<input type="checkbox"/>	SECONDARY1.0AO	SECONDARY1.0AO	No	9/11/23, 2:00 PM	9/11/23, 3:00 PM
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<input type="checkbox"/>	PRIMARY1.0AO	PRIMARY1.0AO	No	9/11/23, 2:00 PM	9/11/23, 2:00 PM																												
<input type="checkbox"/>	SECONDARY1.0AO	SECONDARY1.0AO	No	9/11/23, 2:00 PM	9/11/23, 3:00 PM																												
Allocations																																	

In the Dispatch Console, **View SLA Timeline** allows the user to display all SLA Commitments connected to the Request, Scope, and Task in a calendar.

Dispatch Console

The screenshot shows the Dispatch Console interface. On the left, there's a sidebar with various service and resource filters. The main area displays a grid of resources (Name, Utilization) and their availability over time (Resource ID, Resource Group, Skill, Competency, Certificate). A specific task, "Work Assignment (Task No - 8)", is highlighted with a red border. A tooltip for this task provides detailed information: Request Detail (Repair), Service (EU50 - Implementation Service), Task Description (Implementation Service), Task Status (Released), Allocation Start (11/10/23, 8:05 AM), Allocation Finish (11/10/23, 10:05 AM), and Work Type (Implementation). Below the grid, a "WORK TASKS" section lists tasks with columns for Task No, Description, Task Address, Customer, Scheduling Status, Task Type, Work Assignment Status, and Task Status. One task, "7 Installation", is highlighted with a red border and has a tooltip showing its details: Task No (7), Description (Installation), Task Address (Joan Muykensweg 20, NL20103 - Van Buren Hotel&..., Customer (Joan Muykensweg 20, NL20103 - Van Buren Hotel&...), Scheduling Status (Assigned), Task Type (Implementation), Work Assignment Status (Assigned), and Task Status (Released). A "View SLA Timeline" button is highlighted with a red box.

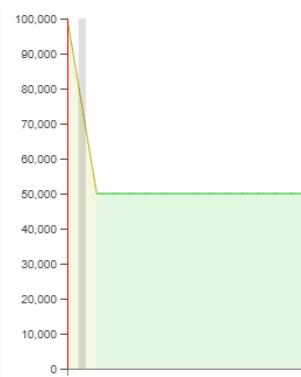
The SLA Timeline panel will then provide a calendar view of the SLA Commitments in relation to the allocated times for the task.

SLA Timeline

This screenshot shows the SLA Timeline panel integrated into the Dispatch Console. It displays a calendar view of tasks and their associated SLA commitments. The top part shows "Task Details" for a task with Task No 8, Description Implementation Service, Duration 2, and Due Date 11/10/23. The main area is titled "SLA Timeline" and shows a weekly calendar from Monday to Sunday. Tasks are represented by colored bars: blue for "Arrived", red for "Response Time", green for "Accepted", and orange for "Arrived". SLA Commitments are listed below the calendar, showing details like Commitment No, Commitment Description, SLA Date, Status, Progress, Time To Due Date, Due Date, Fulfilled By, and Commitment Type. A "Date Constraints" section at the bottom allows for filtering based on various dates and times.

Multiple Template Lines for the Same Event (✍)

When using PSO for Scheduling, there is often a need for more complex SLA structures. An example is an emergency job type with a penalty.



The initial SLA segment is designed with a steep curve to ensure that PSO prioritizes scheduling the job as soon as possible. If the primary SLA is breached, an exception is triggered, and the secondary SLA becomes applicable. As the service provider is subject to a penalty at this point, there is reduced urgency, resulting in a flat curve for the secondary SLA. Nonetheless, the secondary SLA ensures that the job is eventually scheduled - without it, PSO will no longer allocate the job automatically.

Complex SLAs can be achieved using a single SLA Template that references multiple Scheduling SLA Types. Here's an example:

Service > Scheduling > Basic Data > Scheduling SLA Types

Scheduling SLA Types

	Scheduling SLA Type	Description	Start Proportion	End Proportion	Curve Shape	Activity Ageing Factor	Generate Jeopardy Exceptions	Mechanism Type
<input type="checkbox"/>	2001	PrimaryA	1	0.9	1	1	No	Power Based
<input type="checkbox"/>	2002	PrimaryB	0.9	0.5	2	1	Yes	Power Based
<input type="checkbox"/>	2003	Secondary	0.5	0.5	1	1	No	Power Based

PrimaryA and PrimaryB together form the Primary SLA. When this is violated, PSO is supposed to generate Jeopardy Exceptions that the dispatcher will see in the Exceptions panel.

Note: The Scheduling SLA Types only define the type and form of the SLA curve in PSO and whether a violation generates an exception. The actual duration of each phase is specified in the SLA Template and/or the SLA Commitment.

The SLA Template uses PrimaryA for the first 2 hours, followed by 6 hours (8 minus 2 from PrimaryA) PrimaryB. Once the Primary SLA period is over, a flat Secondary SLA will follow for another 16 (24 minus 8) hours. Note that all lines use the calendar OB5X818 with a daily working time from 8:00 to 18:00. Since Cutoff Type is set to Next Day, the SLA counter will start on the next day at 8:00.

SLA Template 200 - Corrective Maintenance ▾ 1 of 1

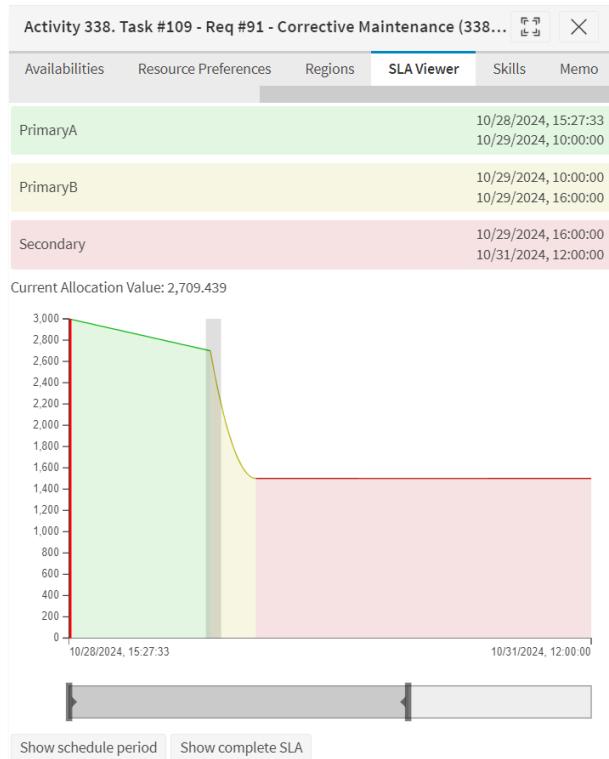
SLA Template ID: 200 SLA Template Description: Corrective Maintenance Revision: 1 Valid From: 10/28/24, 2:26 PM Current

Template Lines	Used By	Revisions															
Y																	
✓	Line ID	Line Description	Commitment Type	Triggering Entity	Triggering Event	Triggering Work Stage	Fulfillment Entity	Fulfillment Event	Fulfillment Work Stage	Duration	Time Unit	Work Task Application	Scheduling SLA Type	Start Based	Calendar	Cutoff Type	Cutoff Time
<input type="checkbox"/>	1	2 hours urgent	Customer Committed	Scope	Created		Scope	Completed		2	Hours	Yes	2001 - PrimaryA	Yes	OBSX818 - Object 5-da...	Next Day	
<input type="checkbox"/>	2	8 hours less urgent	Customer Committed	Scope	Created		Scope	Completed		8	Hours	Yes	2002 - PrimaryB	Yes	OBSX818 - Object 5-da...	Next Day	
<input type="checkbox"/>	3	24 hours out of SLA	Customer Committed	Scope	Created		Scope	Completed		24	Hours	Yes	2003 - Secondary	Yes	OBSX818 - Object 5-da...	Next Day	

When a Request Task uses the above SLA Template, the following SLA Commitments are generated:

Assignments	Resources	Work Steps	Material	Returns	SLA	Time Reports	Planned Cost and Sales	Costs	Sales	Service Notes
Y	Add Commitment	SLA Timeline								
<input type="checkbox"/>	Show Request Commitments	<input type="checkbox"/>	Show Scope Commitments	Apply	Settings					
✓	Commitment Description	Progress	Time to Due Date	Due Date	Fulfillment Entity	Fulfilled by	Scheduling SLA	Commitment Type		
<input type="checkbox"/>	2 hours urgent	Ongoing	0 days, 18 hours, 20 minutes to fulfill	10/29/24, 10:00 AM	Scope	95 - 20	Yes	Customer Committed		
<input type="checkbox"/>	8 hours less urgent	Ongoing	1 days, 0 hours, 20 minutes to fulfill	10/29/24, 4:00 PM	Scope	95 - 20	Yes	Customer Committed		
<input type="checkbox"/>	24 hours out of SLA	Ongoing	2 days, 20 hours, 20 minutes to fulfill	10/31/24, 12:00 PM	Scope	95 - 20	Yes	Customer Committed		

PrimaryA ranges from 8:00 to 10:00, PrimaryB from 8:00 to 16:00, Secondary to 12:00 (the Calendar defines 10 working hours per day i.e., 2 days x 10 hours plus 4 hours on the 3rd day). When sent to PSO, the SLAs will not overlap, instead PrimaryB will be adjacent to PrimaryA, Secondary will be adjacent to Primary B.



SLA Commitments in MWO

SLA Commitments connected to Request Work Tasks are synchronized to MWO under the following conditions:

- The SLA Commitment is fulfilled by the assigned Request Work Task
- The SLA Commitment is fulfilled by a Request/Scope, but has a scheduling connection to the user assigned Work Task
- The SLA Commitment is either **Active** or **Closed**

Service Management > Request Management > Request Task Handling > Request Work Task

Sort by: X

Request Work Task 16770 - HVAC Inspection - MASS 1 of 1

Description: HVAC inspection - MASS
Actual item Description: Released

Task Details Location and Address

Item Details Task Dates

Task Attributes

Planning and Scheduling

ASSIGNMENTS RESOURCES STEPS MATERIAL RETURNS SLA TIME REPORTS PLANNED COST AND SALES COSTS SALES SERVICE NOTES SIGN OFF REQUIREMENTS

Add Commitment

Show Request Commitments Show Scope Commitments Apply Settings

Commitment Description	Progress	Time to Due Date	Due Date	Fulfillment Entry	Fulfilled by	Schedule SLA	Commitment Type
Call to customer within 2 hrs	Ongoing	0 days, 1 hours, 28 minutes to fulfill	9/13/23, 10:00 AM	Request	2988 - SLA2	Yes	Customer Committed
Work Start within 4 hrs	Ongoing	0 days, 3 hours, 28 minutes to fulfill	9/13/23, 12:00 PM	Task	16770 - HVAC Inspection -	No	Internal Only
Work scope done within 8 hrs	Ongoing	0 days, 8 hours, 28 minutes to fulfill	9/13/23, 5:00 PM	Scope	3757 - HVC INSTALL	Yes	Customer Committed
Work Done within 6 hrs	Ongoing	0 days, 6 hours, 28 minutes to fulfill	9/13/23, 3:00 PM	Task	16770 - HVAC Inspection -	No	Customer Committed

Technicians can view SLA commitments for a Request Work Task in MWO. The next active (not fulfilled) SLA Commitment is shown in Work Details.

14:22 Thu 9. Nov Work Details 100 %

Start Work Pause Travel Waiting At Location Cancel ⋮

Task Dates

Duration
2

SLA Commitments

Current Commitment
Arrived
Ongoing

Time to Due Date Due Date
1d 2h 6m to fulfill 10.11.2023 16:23

Fulfillment
Task - WORKSTARTED

Object Information

Object

Service Information

Customer
NL20101-Amazing Web Services Zandvoort

> Material
> Time
> Steps
> Assignments
> Request Scope
> Object
> Service Book
> Expenses
> Debrief
> Measurements
> eForms
> Returns
> Material Order Receipts
> Events
> Tools
> Mobile Integration

All Active & Closed SLA commitments for a Work Task can be accessed through the **SLA Commitments** command. The current progress is visible on each SLA Commitment.

- Active Commitments can either be Ongoing or Overdue.
- Closed Commitments can either be **Fulfilled** or **Exceeded**.

14:24 Thu 9. Nov SLA Commitments 100 %

Time to Due Date: 1d 1h 58m to fulfill

Ongoing

Commitment: Arrived
Due Date: 10.11.2023 16:23
Fulfillment: Task - WORKSTARTED

SLA Visualization

SLA Overview provides an overview of the SLAs within a Request.

Request 1153 - Repair service 1 of 1 New

Request ID: 1153 Description: Repair service Customer: LC NA1057 - Lockbox Customer 1057 Primary Contact:

SLA Overview Access Control

Use **SLA Timeline** on the Task's SLA tab to visualize SLA Commitments on task level.

SLA Timeline

Commitment Description	Progress	Time to Due Date	Due Date	Fulfillment Entity	Fulfilled by	Scheduling SLA	Commitment Type
Finished within 8 Hours.	Ongoing	2 days, 23 hours, 54 minutes to fulfill	3/25/24, 1:09 PM	Task	8860 - Reactive Call Out	Yes	Customer Committed

The panel shows a progress bar and a calendar with SLA Commitments indicating their due dates and statuses.

SLA Timeline

Calendar View

W. 8 - 14 | MARCH 2024

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
w.8 25		26	27	28	29	01
w.9 03		04	05	06	07	08
w.10 10		11	12	13	14	15
w.11 17		18	19	20	21	22
w.12 24		25	26	27	28	29
w.13 31		01	02	03	04	05

SLA Commitments

Date Constraints

Fixed Start	Earliest Start	Latest Start	Latest Finish	Planned Start	Planned Finish	Appointment Start	Appointment Completion	SLA Latest Start	SLA Latest Finish
3/19/24, 8:00 AM	3/22/24, 2:00 PM	3/22/24, 3:00 PM	3/20/24, 1:00 PM	3/20/24, 2:00 PM					

OK Cancel

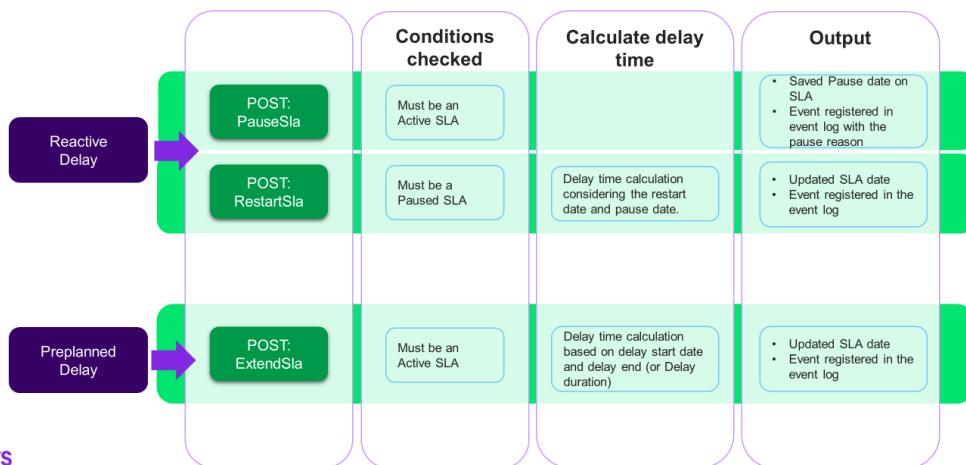
SLA Management APIs

APIs are available to pause, restart, and extend SLAs:

- API endpoints to pause and restart the SLA Commitments.
- SLA Commitments are adjusted to reflect the impact of pause or restart events accurately.
- SLA Commitments can be adjusted in time directly from the API calls.

SLA Management- APIs Solution

APIs to Pause, Restart and Extend SLAs

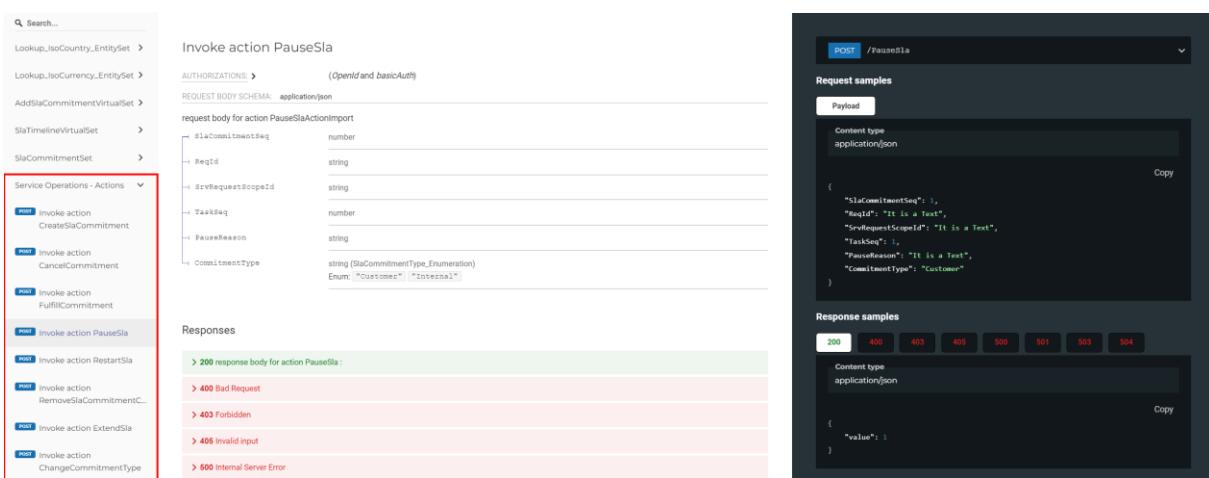


The API to be used is “**SlaCommitmentDetailsHandling**”...



API Name	Description	Component	Categories	Layer	API Class	Active	Degraded
SlaCommitmentDetailsHandling	SLA Commitment Details Handling	SLA	Users	Core	Standard	Yes	No

...with the above-mentioned functions:



Invoke action PauseSla

AUTHORIZATIONS: (OpenId and basicAuth)

REQUEST BODY SCHEMA: application/json

request body for action PauseSlaActionImport

- SlaCommitmentSeq: number
- ReqId: string
- SrvRequestScopeId: string
- TaskSeq: number
- PauseReason: string
- CommitmentType: string (SlaCommitmentType_Enumeration) Enum: "Customer" | "Internal"

Responses

- > 200 response body for action PauseSla:
- > 400 Bad Request
- > 403 Forbidden
- > 405 Invalid input
- > 500 Internal Server Error

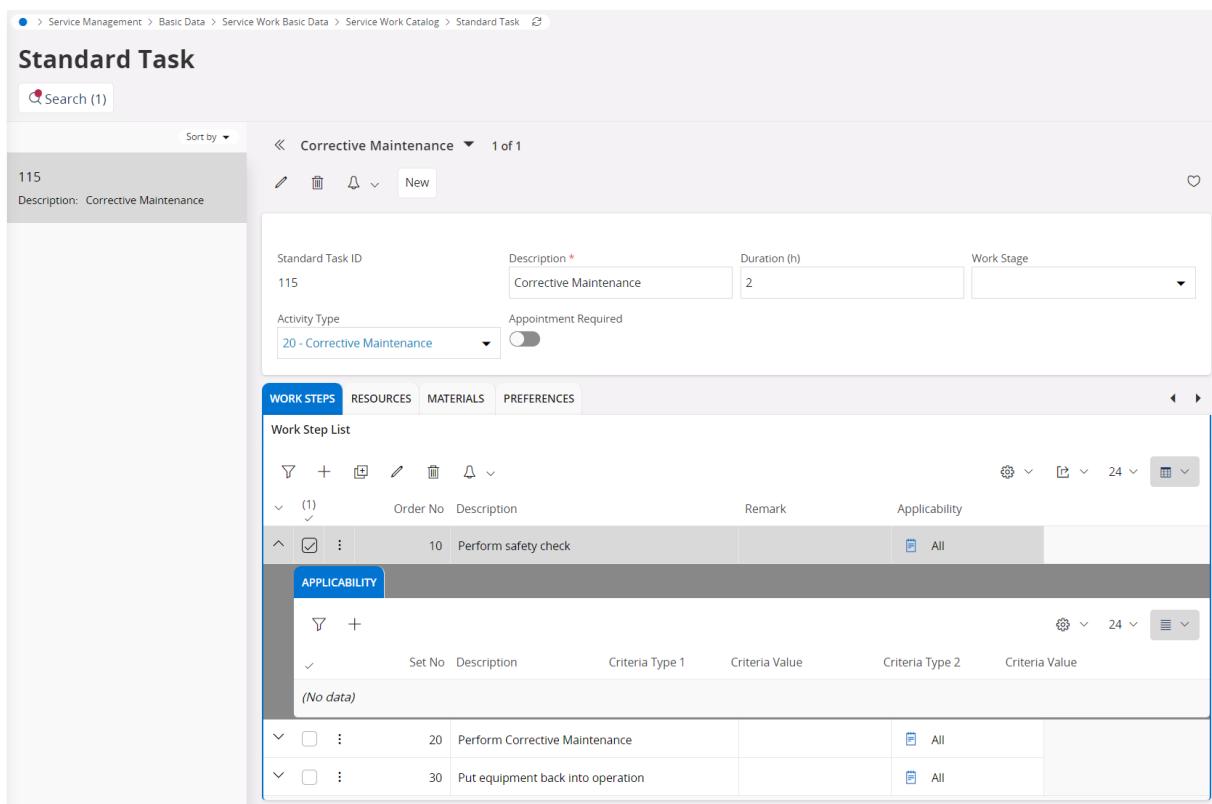
Note: Pause, restart, and extend actions can only be triggered using APIs, not through the user interface. This is by design as the business process (not the end user) should define under which conditions an SLA gets paused. An example for an end-user driven event would be setting a status to “Waiting for customer”, the status change could then trigger a BPA workflow.

Service Catalog and Standard Tasks

Standard Tasks (25R1P)

Service Management>Basic Data>Service Work Basic Data>Service Work Catalog>Standard Task

Standard tasks are used to predefine the execution of services. They are templates used to create work tasks in the Request. Standard tasks are not used directly, rather through the selection of a service from the [Service Catalog](#) (25R1P).

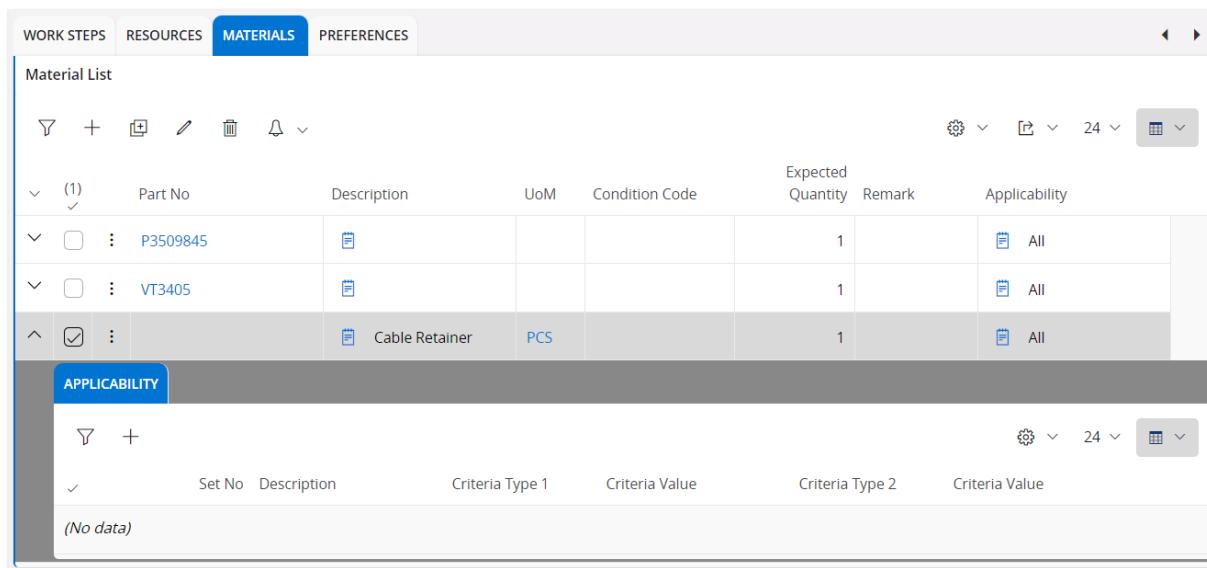


The screenshot shows the 'Standard Task' configuration screen in the IFS Service Management application. The task is titled 'Corrective Maintenance' with ID 115. It has a duration of 2 hours and is categorized under '20 - Corrective Maintenance'. The 'Work Stage' dropdown is empty. The 'WORK STEPS' tab is selected, showing a list of steps: 'Perform safety check' (Order No. 10) and 'Perform corrective maintenance' (Order No. 20). The 'APPLICABILITY' tab shows no data.

A standard task contains:

- Duration - specified in hours
- Activity Type – This attribute is essential for scheduling as activity type refers to Scheduling Activity Types in PSO. It defines (among others) the activity base value, appointment template, and whether multiple visits are allowed. For details refer to [Scheduling Demystified](#). Activity Types are also important for IFS Mobile (MWO) as they can be used to determine which workflow template to apply. For details refer to [MWO Demystified](#).
- Work Stage
- Appointment Required – indicates that this work needs to be appointment-booked
- 0..n Work Steps that further specify how work should be carried out. In IFS Mobile (MWO) these steps are presented as a check list.
- Resource requirements with the possibility to add competency and certificate requirements and required skills.
- Material/part requirements

To be able to plan parts that are not inventory parts, nor non-inventory purchase parts, it is possible to predefine “No Parts”, sometimes also referred to as “write-in products”. No Parts can automatically create purchase requisitions during the Request creation phase, eliminating the need for manual creation of such material requirements on each Request Work Task. To specify a no part, leave **Part No** empty and instead provide a **Description**. The UoM field allows you to specify the unit of measure of the no-part. If a **Part No** (number) is selected, the UoM value will be set automatically.



The screenshot shows the IFS Materials module interface. At the top, there are tabs: WORK STEPS, RESOURCES, MATERIALS (which is selected), and PREFERENCES. Below the tabs is a 'Material List' header with icons for search, add, edit, delete, and refresh. The main area is a grid table with the following columns:

	Part No	Description	UoM	Condition Code	Expected Quantity	Remark	Applicability
▼ (1)	P3509845				1		All
▼	VT3405				1		All
^	<input checked="" type="checkbox"/> :	Cable Retainer	PCS		1		All

Below the grid is a section titled 'APPLICABILITY' with a table:

	Set No	Description	Criteria Type 1	Criteria Value	Criteria Type 2	Criteria Value
(No data)						

It is possible to define **Applicabilities** on work steps, resources, resource competencies, resource certificates, materials. An applicability on the respective item is a condition that will be applied when a work task is created from a standard task. Conditions can use the Service Object's Manufacturer, Object Type, and Category as criteria. Conditions in the same row are combined using AND, across rows using OR. If a row evaluates to TRUE, the row will be inherited by the work task, otherwise it's ignored.

Service Management > Service Management Basic Data > Standard Task Library > Standard Task

Standard Task Preventive Maintenance 1 of 1

Sort by ▾

25-110
Description: Preventive Maintenance
Work Stage:

Standard Task ID	Description	Duration	Work Stage
25-110	Preventive Maintenance	0.5	

Activity Type
50 - Preventive Maintenance

WORK STEPS RESOURCES MATERIALS

Work Step List

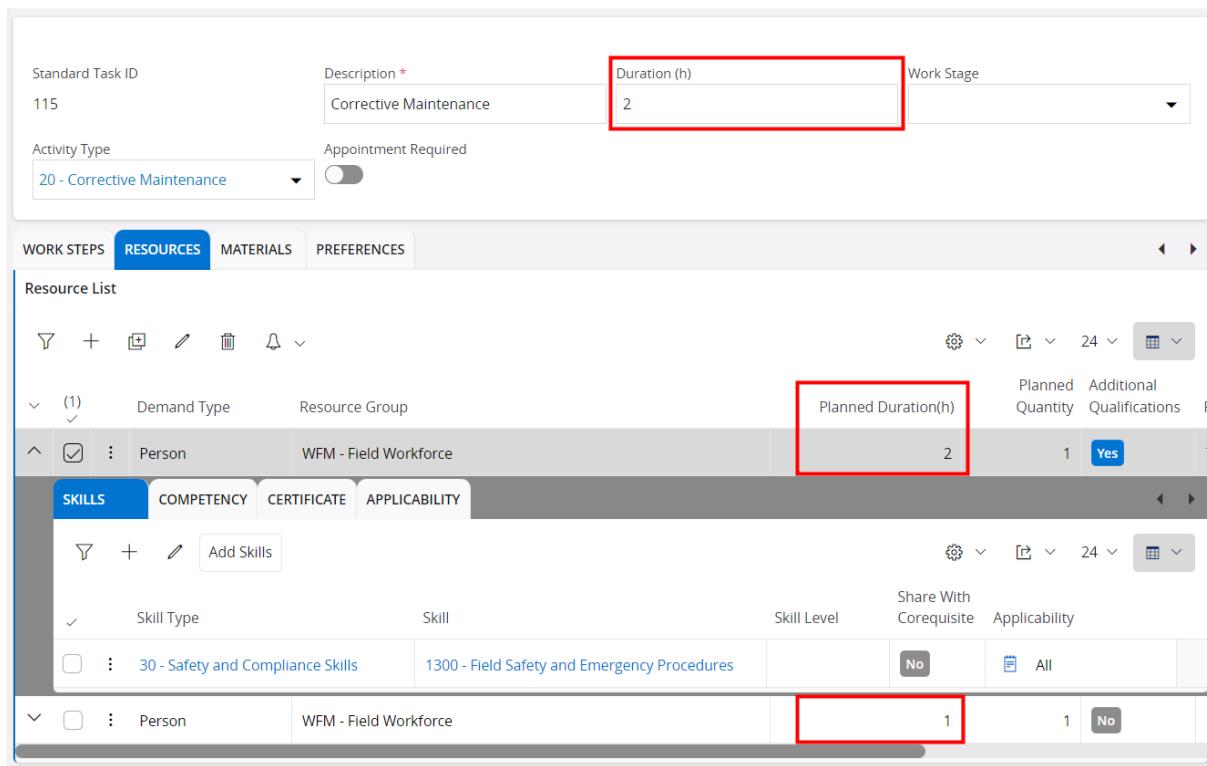
Order No	Description	Remark	Applicability
10	Perform safety check		All
20	Decommission equipment		All
30	Perform Preventive Maintenance		All
40	Reconstruct equipment		All
50	Put equipment back into operation		All
60	Extra check for Industrial fans only		Object Type: 20

APPLICABILITY

Set No	Description	Criteria Type 1	Criteria Value	Criteria Type 2	Criteria Value
1	Industrial fans only	Object Type	20 - Industrial fans		

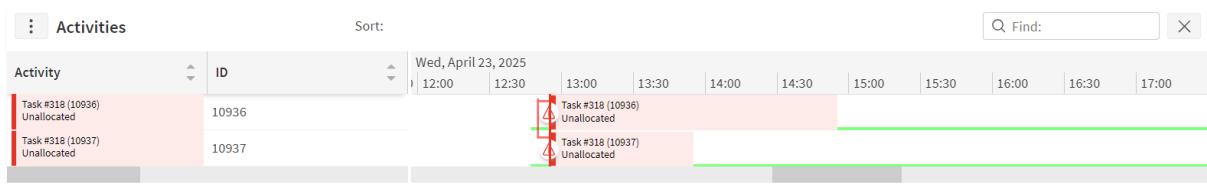
The benefit of Applicabilities is that they can massively reduce the number of standard tasks if these only slightly differ by product group. Instead of having several permutations of manufacturer, type, and category these can all be combined into a single standard task with multiple availabilities.

The **Resources** tab is used to define 1..n resource demands i.e., list resources required to execute the work. For each demand it is possible to list required skills, competencies, and certificates (see [Skills](#)).



The screenshot shows the IFS Work Management interface for task setup and resource allocation. At the top, a standard task is defined with a duration of 2 hours. Below this, the 'RESOURCES' tab is selected in the 'WORK STEPS' section. A 'Resource List' is displayed, showing two resource entries. The first entry is for a 'Person' resource named 'WFM - Field Workforce', which has a 'Planned Duration(h)' of 2. The second entry is also for a 'Person' resource named 'WFM - Field Workforce', which has a 'Planned Duration(h)' of 1. Both resources have a 'Yes' value in the 'Additional Qualifications' column.

Planned Hours on the individual resource demand can differ from the **Duration** specified for the standard task. An example of that is a repair that takes the technician 2 hours; however, a helper is needed for the first hour only to help with heavy lifting or to ensure safety rule compliance. PSO receives these two resource demands as “co-requisite” activities, ensuring that despite that different durations both allocations will start at the same time.



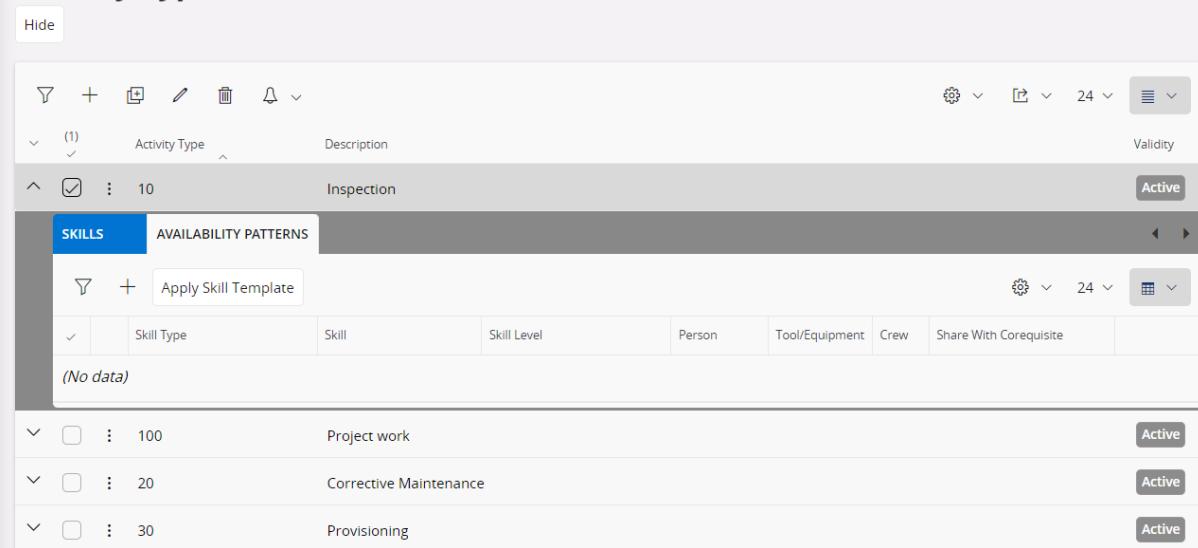
The screenshot shows the IFS Work Management interface for activity scheduling. A grid displays activities scheduled for Wednesday, April 23, 2025, from 12:00 to 17:00. Two tasks are listed: Task #318 (10936) and Task #318 (10937). Both tasks are currently unallocated. The timeline shows a red bar for Task #318 (10936) from 12:00 to 13:00, and a green bar for Task #318 (10937) from 13:00 to 17:00.

Activity Types

📁 Service Management>Basic Data>Service Work Basic Data>Task Basic Data>Activity Types

Activity Types were introduced for NGSM as an equivalent to Work Types in Work Order management. As such, they only apply to Request Tasks.

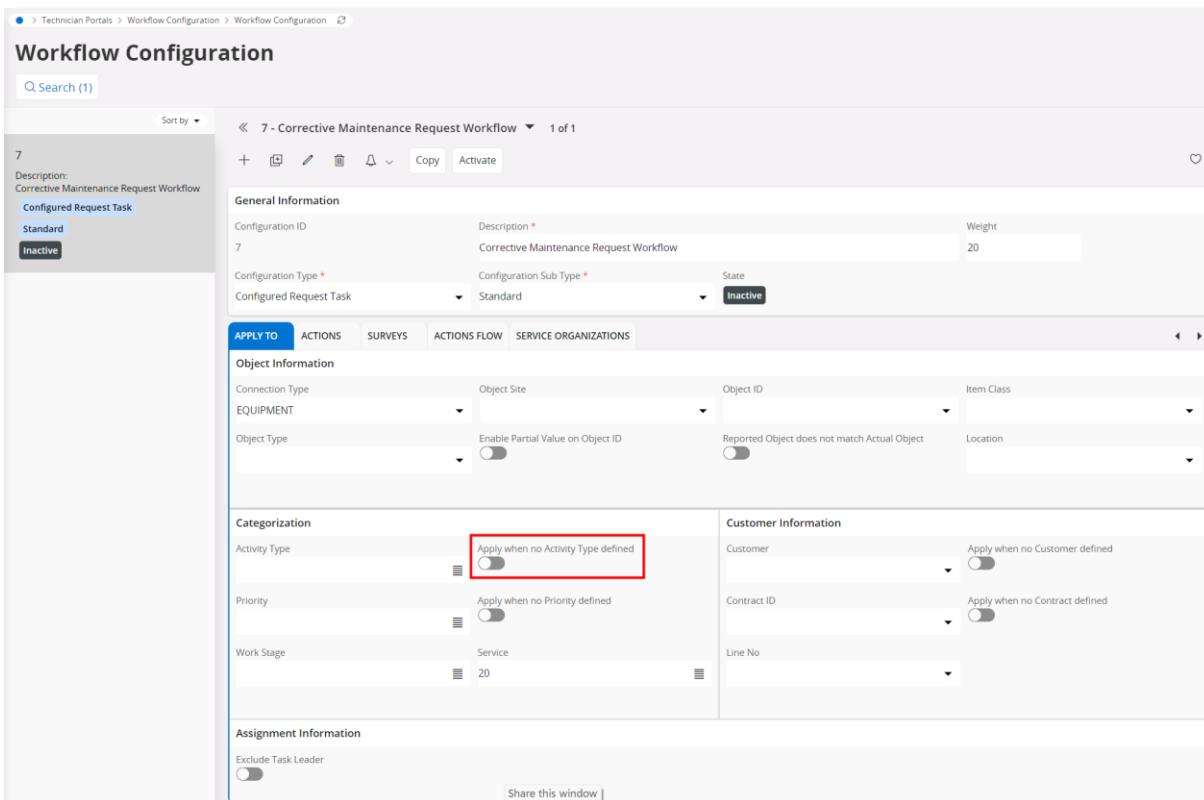
Activity Types



Activity Type	Description	Validity
Inspection		Active
Project work		Active
Corrective Maintenance		Active
Provisioning		Active

What differentiates them from Work Types is the possibility to add required Skills (skills required for executing Request Task with this Activity Type, see [Skills](#)) and Availability Patterns (Request Task with this Activity Type can only be scheduled during certain times, see [Availability Patterns](#)).

Activity Types can be used as filters when defining Technician Workflows (see [MWO Demystified](#)) of type **Request Task** and **Configured Request Task**. The filter allows specification of multiple activity types for a single workflow configuration; there is also a filter to use a configuration when no Activity Type was specified on the Request Task.

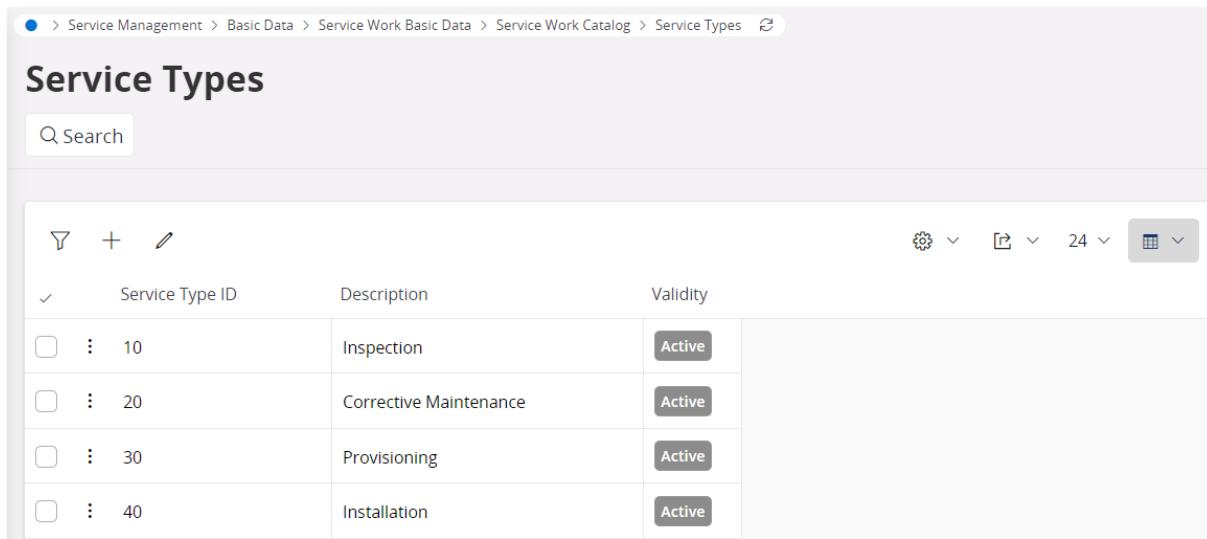


General Information	Object Information	Customer Information
Configuration ID: 7 Description: Corrective Maintenance Request Workflow Configured Request Task: Standard Status: Inactive	Object Site Object Type Connection Type: EQUIPMENT Object Type: Object Enable Partial Value on Object ID Reported Object does not match Actual Object	Customer Contract ID Line No
Categorization	Activity Type Priority Work Stage	Customer Information Contract ID Line No
Assignment Information	Service 20	

Service Types (25R1★)

 Service Management>Basic Data>Service Work Basic Data>Service Work Catalog>Service Types

Service Types can be used to categorize Services in the Service Catalog.



Service Type ID	Description	Validity
10	Inspection	Active
20	Corrective Maintenance	Active
30	Provisioning	Active
40	Installation	Active

When end users create Requests, they can select a Service Type, which will filter the available Services.

Service Catalog (25R1↗)

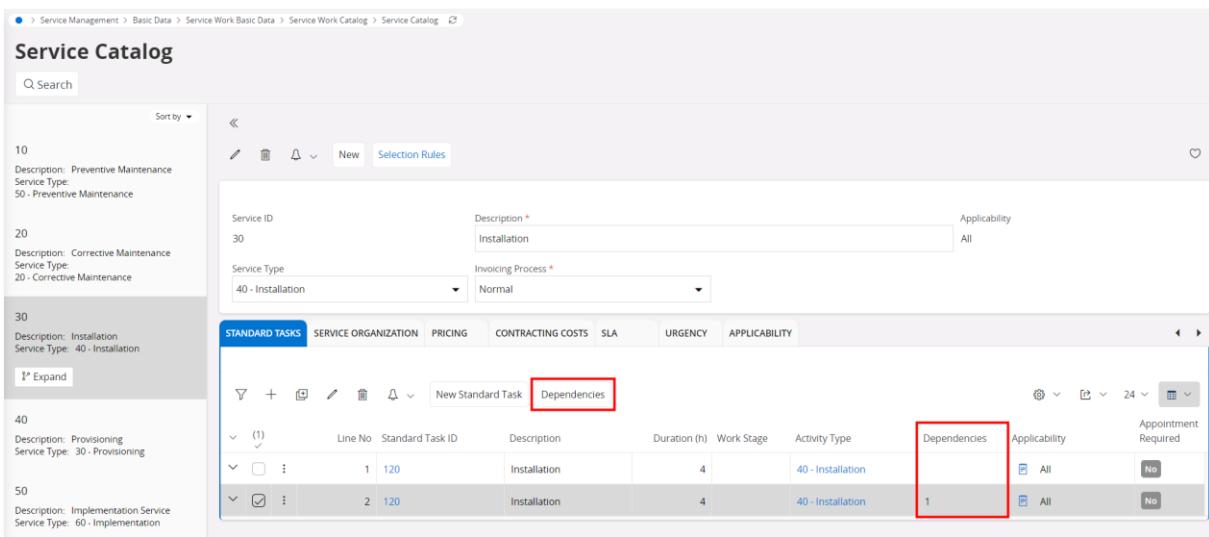
 Service Management>Basic Data>Service Work Basic Data>Service Work Catalog>Service Catalog

The Service Catalog is a collection of services that a provider offers to its customers.

Service contains:

- Description of the service
- Service Type allows the end user to filter services of a specific type when creating new Requests. See [Service Types \(25R1★\)](#).
- Appointment Required – indicates that this work needs to be appointment-booked. Default defined on Standard Task, can be modified on the individual service.
- Standard tasks, i.e., how the service is conducted. These tasks come from the [Standard Tasks library](#). The Standard Task's **Activity Type** and **Work Stage** can be overridden.
- Service Organization(s) that offers the service
- Pricing rules that define how the service is priced
- Applicability, i.e. what Model/Part no/Object type is this service available for
- SLA for the service. Uses the NGSM SLA management. See [SLA Management](#).
- Urgencies that allow the customer to select a better SLA, which typically comes with different pricing.

A single service can contain multiple standard tasks with optional dependencies (relevant for Dispatch Console and PSO) and dependency attributes that specify the sequencing (only relevant for PSO). For more details refer to [Scheduling Demystified](#).



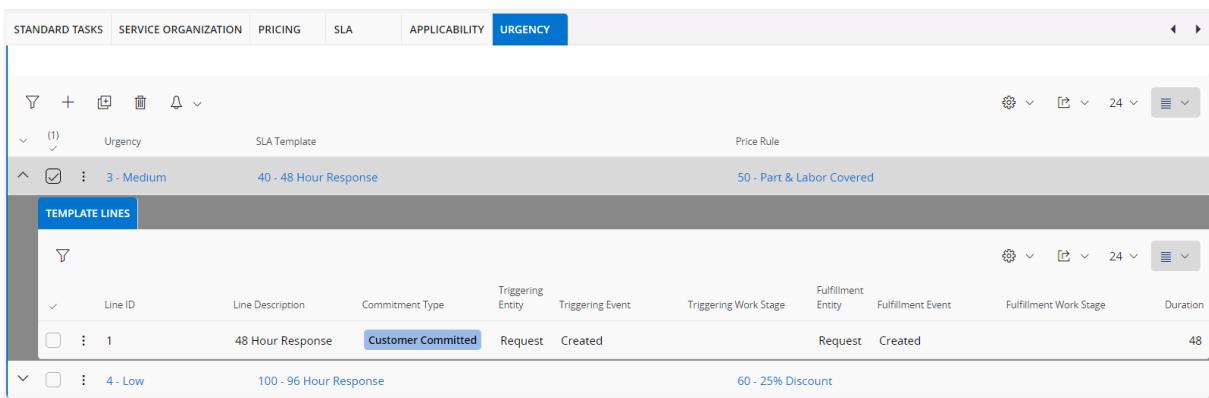
The screenshot shows the Service Catalog interface. On the left, a sidebar lists services: 10 (Preventive Maintenance), 20 (Corrective Maintenance), 30 (Installation), 40 (Provisioning), and 50 (Implementation). The main area displays service 30 with its description and service type. Below this, the 'STANDARD TASKS' tab is selected, showing two tasks: Line No 1 (Standard Task ID 120, Description: Installation, Duration: 4 hours, Activity Type: 40 - Installation) and Line No 2 (Standard Task ID 120, Description: Installation, Duration: 4 hours, Activity Type: 40 - Installation). A red box highlights the 'Dependencies' column for both tasks, which are listed as '1'. To the right of the dependencies, the 'Applicability' column shows 'All' for both rows.

Invoicing Process supports the following options:

- **Normal:** Invoice Previews need to be created manually.
- **Allow for Quick Generation of Invoice Preview:** Auto-create the Invoice Preview after Request Scope completion.
- **Allow for Quick Generation of Customer Order:** Auto-create Customer Order after Request Scope completion.

Similar to [Standard Tasks](#) it is possible to define **Applicabilities** on the service's standard tasks and the service itself. If none of the rules on the service evaluate to TRUE, the service is not available in the request scope selection.

Urgencies allow the customer to request a non-standard urgency during Request creation. The urgencies are maintained at  [Service Management>Basic Data>Service Work Basic Data>Work Classifications>Urgencies](#), on the individual service they are then listed with the respective price rule:



The screenshot shows the Urgency configuration interface. At the top, the 'URGENCY' tab is selected. Below it, a table shows a single urgency entry: '3 - Medium' with '40 - 48 Hour Response' and '50 - Part & Labor Covered'. This row is highlighted with a blue background. Below this, the 'TEMPLATE LINES' tab is selected, showing two template lines: '1' (Line ID 1, Description: 48 Hour Response, Commitment Type: Customer Committed, Triggering Entity: Request, Triggering Event: Created, Fulfillment Entity: Request, Fulfillment Event: Created, Duration: 48 hours) and '4 - Low' (Line ID 4, Description: 100 - 96 Hour Response, Commitment Type: Customer Committed, Triggering Entity: Request, Triggering Event: Created, Fulfillment Entity: Request, Fulfillment Event: Created, Duration: 60 - 25% Discount).

Urgency can be set in New Request Assistant. When **Filter Urgency based on Service** is activated, only urgencies listed for this service are displayed. Upon selection the SLA and Price Rule will be set accordingly.

New Request

Request Information

Description *	Described Problem/Symptom	Customer Reference
Remote Diagnostics		

Customer Information ▼

Reported Item ▼

Service and Contract Information

Service Type	Service *	Service Organization *	Service Delivery Unit
90 - Diagnostics	60 - Remote Diagnostics	2501 - Ventechi Netherlands	2501-NORTH - Ventechi Netherlands North

Contract

Classification

Filter Urgency based on Service	Urgency	Priority
<input checked="" type="checkbox"/>	3 - Medium	

SLA and Price Rule

SLA Template	SLA Source
20 - Silver	Service
Price Rule	Price Rule Source
50 - Part & Labor Covered	Service

It is possible to use a “Default” service, which can be automated if needed and configured to pre-handle the right skills etc. for the product being seen. When the technician gets onsite, they can alter the scope by adding the correct catalog items. This is the customer facing view of the work being requested/done and abstracts the customer from "how" that work is done.

Recurring Services

Concept

Recurring Service is similar to Preventative Maintenance (or “PPM”) in EAM/ESM (using PM Actions etc.), but instead of being asset-centric it focuses on customer-centric preventative service management.

The design of recurring services had the following goals:

- More flexibility in defining recurring services with a multitude of service triggering mechanisms.
- Ability to generate more realistic calendar-based program schedules by applying pre-defined calendars and planning tolerance.
- Service to be scheduled at the optimal time which lessens the chances of disruption to normal operations.
- Template for recurring services to simplify the creation of the Recurring Service Program while encouraging repeatability and efficiency.
- Reduce administration time.
- Confirmed service schedules to increase visibility into long-term service management planning while providing customized pricing and SLA based on customer requirements.
- Increased focus on outcomes and increasing customer value.

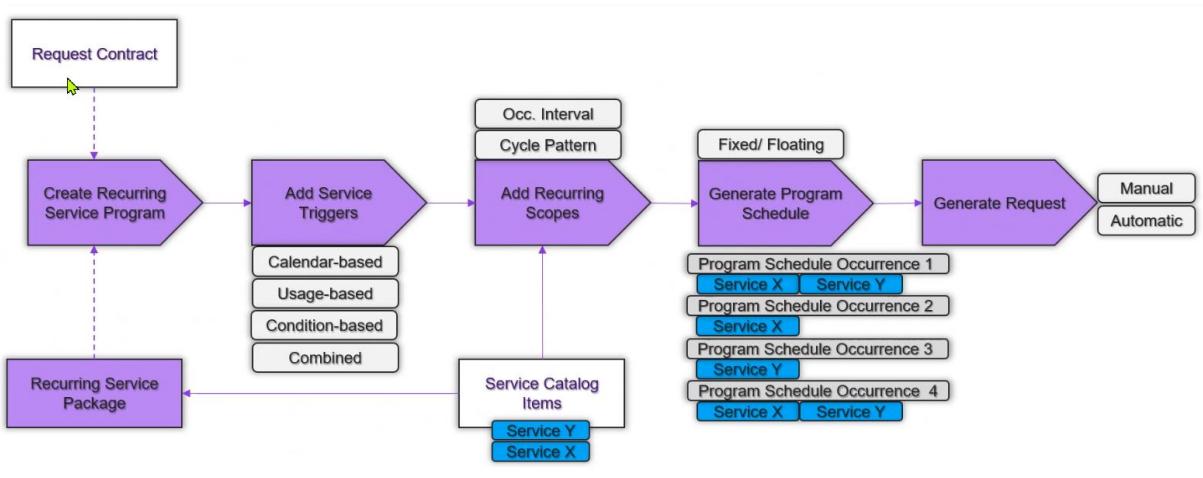
Term	Explanation
Recurring Services	Services that are to be executed at a recurring basis
Recurring Service Program	Used to synchronize multiple recurring services for efficient execution where the services are related by the same base schedule; <ul style="list-style-type: none"> ▪ Calendar-based (daily, weekly, monthly, yearly) ▪ Cumulative Usage-based (every X hours, kilometers, number of copies, etc.) ▪ Non-cumulative usage – Condition based ▪ Combined triggers
Recurring Service Scopes	Service scopes for which the recurrence pattern can be set up by either a scope Occurrence Interval (<i>an even pattern</i>) or by adding a Cycle Pattern (<i>an uneven pattern</i>).
Program Schedule	<ul style="list-style-type: none"> ▪ Program has a base schedule. ▪ Consists of service occurrences inside the Program valid dates. ▪ Shows combination of service scopes that are due at a given service occurrence. ▪ Can be generated into requests.

Recurring Service Programs

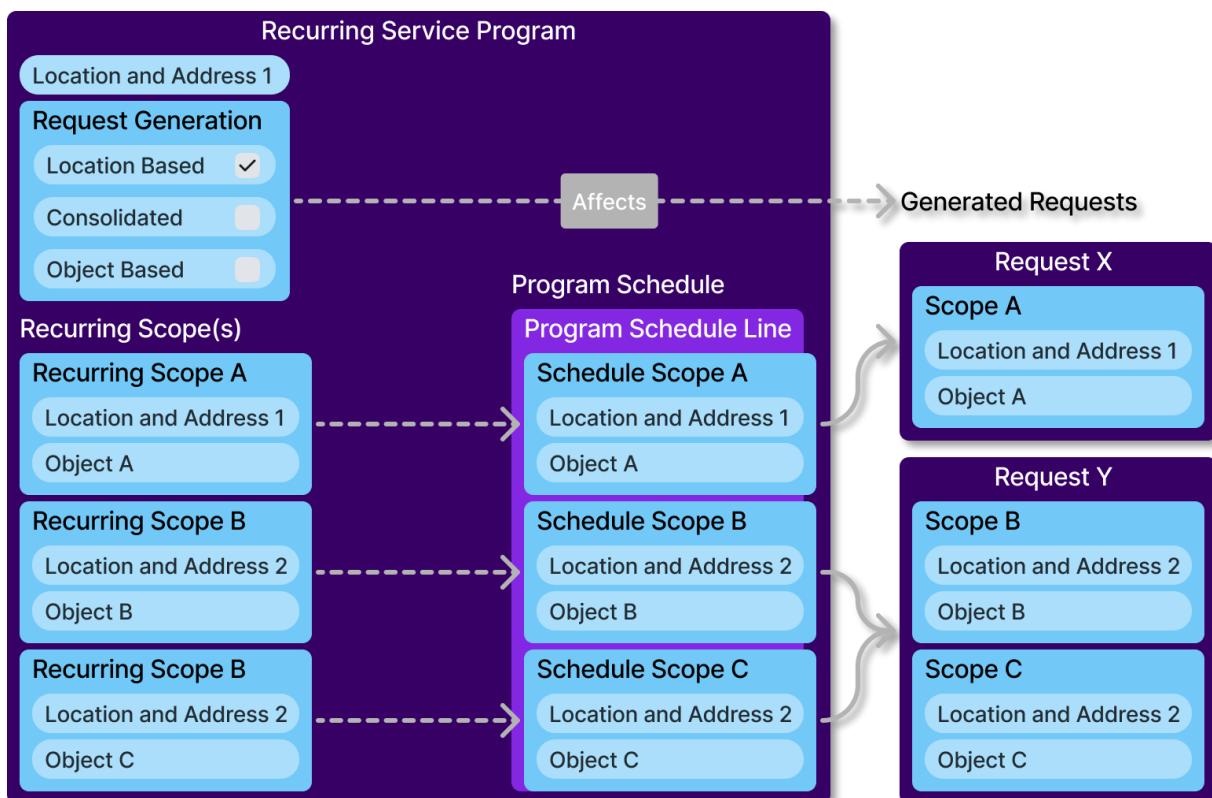
 Service Management>Recurring Service>Recurring Service Program

In a nutshell, service programs allow the automatic creation of Requests by bringing together the

- **when** – definition of service triggers such as “monthly” or “based on a failure condition”
- **what** – by referring to the Service Catalog and its Standard Services that define how work is to be executed, which resource(s) are needed, etc.
- **to which item** – this can be a specific service object or – more generic – a model



This includes location handling for enhanced location-based service delivery, providing the ability to define recurring scopes with a location.



Request generation now allows the user to choose how Scopes are grouped on Requests. This is indicated by the **Request Generation** method that can be altered using the button.

Recurring Service Program RSP000424 - Yearly Service 1 of 1

Active

Request Generation 

- Object Based
- Location Based
- Request Generation**
- Consolidated**

Program	Description	Service Organization
RSP000424	Yearly Service	209 - Ventechi Netherlands
Valid From	Valid To	Trigger Type
12/5/2023		Calendar
Floating Schedule		

GENERAL SERVICE TRIGGERS SERVICE SCOPE STANDARD TASKS SCHEDULE

Recurring Program Schedule

		Generate Schedule	Generate Request							
(1)	Trigger Type	Schedule Status	Due Next	Test Point	Parameter	UoM	Request	Request Status	Request Completed	Manually Changed
1	Calendar	Generable	1/16/24, 8:00 AM							
2	Calendar	Generable	1/21/25, 8:00 AM							
3	Calendar	Generable	1/20/26, 8:00 AM							

The available options are:

- Object Based:** Requests are grouped based on the service objects.
- Location Based:** Requests are grouped based on locations.
- Consolidated:** All scopes are consolidated into one Request.

Calendar-based Recurring Service Programs

Recurring Service Program SP-NL20101 - Monthly service + IoT 1 of 1

Preliminary

Trigger Type 

- Calendar**

Program	Description	Service Organization
SP-NL20101	Monthly service + IoT	20 - Servitization Netherlands
Valid From	Valid To	Package
7/1/2023	12/31/2023	
Floating Schedule		

GENERAL SERVICE TRIGGERS SERVICE SCOPE STANDARD TASKS SCHEDULE

Calendar Settings

Object Calendar	Location Calendar	Service Org Calendar	All Year	Calendar	Tolerance Days
				* . Default calendar	0

Calendar-based

Interval Type	Program Interval	Day Picker
Month	1	Day

Services are triggered based on a calendar schedule. One of the calendar options must be selected to generate the recurring service program schedule. If the calculated day is a non-working day in the specified calendar, this date would not be considered. The example below shows a Mon-Fri calendar and a monthly recurrence. 10/1/2023 is a Sunday, so this date is ignored.

GENERAL SERVICE TRIGGERS SERVICE SCOPE STANDARD TASKS SCHEDULE

Recurring Program Schedule

	Trigger Type	Schedule Status	Due Next
<input type="checkbox"/>	Calendar	Generable	8/1/23, 8:00 AM
<input type="checkbox"/>	Calendar	Generable	9/1/23, 8:00 AM
<input type="checkbox"/>	Calendar	Generable	11/1/23, 8:00 AM
<input type="checkbox"/>	Calendar	Generable	12/1/23, 8:00 AM

Since this is usually not intended, **Tolerance Days** can be used to shift the original Due Next of a program schedule line to the immediate available/ working day on which the service occurrence can be planned. In the example above setting Tolerance Days=-2 moves the date to Friday...

<input type="checkbox"/>	Calendar	Generable	9/29/23, 8:00 AM
--------------------------	----------	-----------	------------------

While Tolerance Days=2 moves it to Monday:

<input type="checkbox"/>	Calendar	Generable	9/1/23, 8:00 AM
--------------------------	----------	-----------	-----------------

Usage-based Recurring Service Programs

Recurring Service Program SP-NL20101 - Monthly service + IoT 2 of 2 Preliminary

Program SP-NL20101	Description Monthly service + IoT	Service Organization 20 - Servitization Netherlands																																				
Valid From 7/1/2023	Valid To 12/31/2023	Package																																				
Floating Schedule <input checked="" type="checkbox"/>	Trigger Type Combined																																					
GENERAL SERVICE TRIGGERS SERVICE SCOPE STANDARD TASKS SCHEDULE																																						
Calendar Settings																																						
+																																						
Calendar-based																																						
Usage/Condition-based																																						
<table border="1"> <thead> <tr> <th>Trigger Type</th> <th>Service Object</th> <th>Test Point</th> <th>Parameter</th> <th>UoM</th> <th>Start Value</th> <th>Interval</th> <th>Last Recorded Value</th> <th>Trigger Line No.</th> <th>Min Value</th> <th>Max Value</th> <th>Range Condition</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/></td> <td>Condition</td> <td>NLVITZ2001 - Ventechi Z...</td> <td>30 - High side pressure</td> <td>30 - Pressure</td> <td>bar</td> <td></td> <td></td> <td>2</td> <td>1</td> <td>2</td> <td>Outside</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Usage</td> <td>NLVITZ2001 - Ventechi Z...</td> <td>10 - Operating hours</td> <td>40 - Operating ho...</td> <td>h</td> <td>1000</td> <td>5000</td> <td>3</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>			Trigger Type	Service Object	Test Point	Parameter	UoM	Start Value	Interval	Last Recorded Value	Trigger Line No.	Min Value	Max Value	Range Condition	<input type="checkbox"/>	Condition	NLVITZ2001 - Ventechi Z...	30 - High side pressure	30 - Pressure	bar			2	1	2	Outside	<input type="checkbox"/>	Usage	NLVITZ2001 - Ventechi Z...	10 - Operating hours	40 - Operating ho...	h	1000	5000	3			
Trigger Type	Service Object	Test Point	Parameter	UoM	Start Value	Interval	Last Recorded Value	Trigger Line No.	Min Value	Max Value	Range Condition																											
<input type="checkbox"/>	Condition	NLVITZ2001 - Ventechi Z...	30 - High side pressure	30 - Pressure	bar			2	1	2	Outside																											
<input type="checkbox"/>	Usage	NLVITZ2001 - Ventechi Z...	10 - Operating hours	40 - Operating ho...	h	1000	5000	3																														

Services are triggered based on the actual condition of the service object. Test points and parameters must have been defined for the Service Object to be able to add service triggers for the program.

Trigger Type determines whether the service is triggered based on cumulative usage (e.g., service every 5,000 operating hours) or a condition criterion (i.e., value is outside of a certain bandwidth). The **Service Object**, its **Test Point** and **Parameter** define which measurement is used for the comparison.

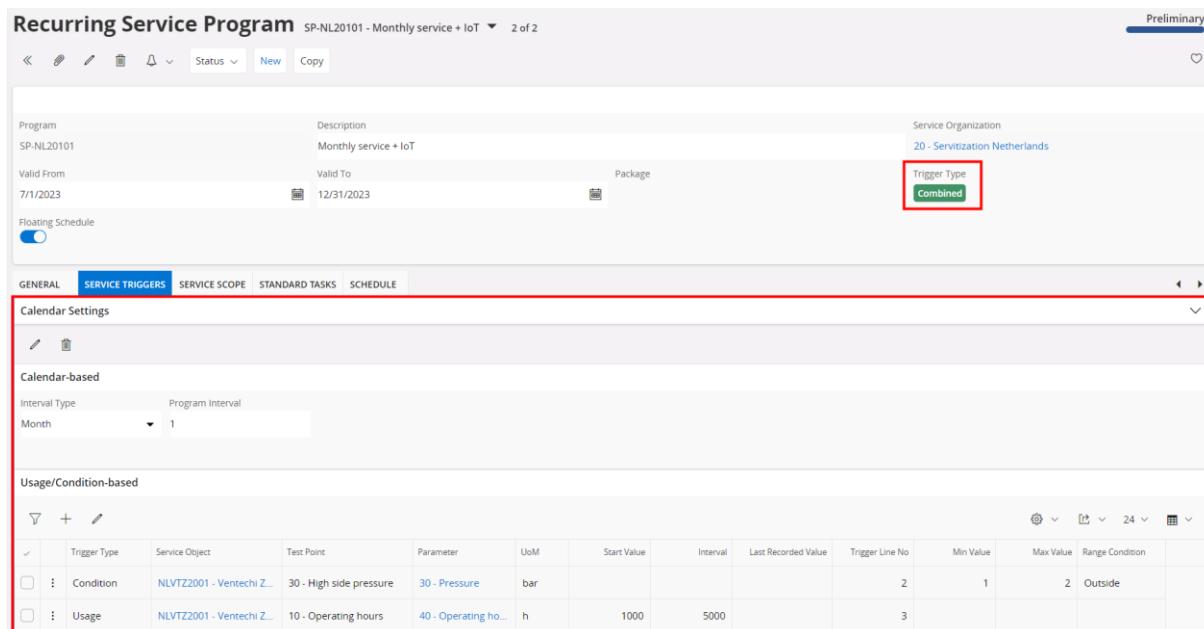
For usage-based triggers, **Start Value** determines the reading that the parameter must reach before triggering the first usage schedule occurrence. This field is only applicable for Usage/Accumulate parameters. **Interval** specifies when a new usage schedule occurrence is created.

For condition-based triggers, the service is triggered:

- if the reading is higher than the **Max Value** or
- if the reading is lower than the **Min Value** or
- if the reading is inside **Min Value** and **Max Value** or
- if the reading is outside **Min Value** and **Max Value**.

Note: Combined triggers will always activate **Floating Schedule**, which means that only one open request is allowed at any given time. The next program occurrence will be created only after completion of the current Request.

Combined Recurring Service Programs



The screenshot shows the 'Recurring Service Program' configuration screen for program SP-NL20101. The 'GENERAL' tab is selected. A red box highlights the 'SERVICE TRIGGERS' tab, which is currently active. Another red box highlights the 'Usage/Condition-based' section of the triggers table. In the triggers table, there are two entries: one for 'Condition' (NLVTZ2001 - Ventechi Z...) with a trigger type of '30 - High side pressure' and another for 'Usage' (NLVTZ2001 - Ventechi Z...) with a trigger type of '10 - Operating hours'. The 'Trigger Type' column shows 'Combined' for both rows. The 'Service Organization' is listed as '20 - Servitization Netherlands'.

The service is triggered based on whichever comes first out of a combination of triggers. There can be different combinations of triggers:

- Calendar/ Usage
- Calendar/ Condition
- Calendar/ Usage/ Condition
- Multiple Usages
- Multiple Conditions

Recurring Scopes

Recurring scopes define the service that will be provided and the applicable Service Object or Model. Location and Address are managed on the Recurring Scope level.

Recurring Service Program RSP000424 - Yearly Service 1 of 1

Valid From: 12/5/2023

Floating Schedule

Description: Yearly Service

Service Organization: 209 - Ventechi Netherlands

Trigger Type: Calendar

Request Generation: Consolidated

Regenerate the schedule

SERVICE SCOPE

Recurring Scope	Package	Service	Model	Object Site	Object	Location	Address	Contract Line	Occurrence
322	25-10 - Preventive Maintenance	VITZSR - Ventechi-Z Series					695 - Joan Muyskenweg 20, NL	joan Muyskenweg 20, 1096 ...	
421	25-80 - Inspection	VITZSR - Ventechi-Z Series	209 - Ventechi Netherlands	NLVITZ2097 - Ventechi Z series units					

When a new scope is created, the service is picked from the Service Catalog. The object location will be used as default for the Recurring Scope Location.

Service Management > Recurring Service > Recurring Service Program > New Recurring Scope

New Recurring Scope

Service Scope Recurrence Parameters

Service: 25-80 - Inspection

Contract Line

Contract Line: 12/5/2023

Item Information

Model: VITZSR - Ventechi-Z Series

Object: NVITZ2097 - Ventechi Z series units

Location: 695 - Joan Muyskenweg 20, NL

Previous Next Finish Cancel

By using the **Select Multiple Objects** toggle, it is possible to select objects from a list, which also shows the individual locations and addresses. If the selected objects do not have a location, the Recurring Scope will be created with the **Location** defined in the Item Information section.

Service Management > Recurring Service > Recurring Service Program > New Recurring Scope

New Recurring Scope

Service Scope Recurrence Parameters

Service: 25-80 - Inspection

Contract Line: Valid From: 12/5/2023 Valid To:

Item Information: Model: VTZSR - Ventechi-Z Series Location: 695 - Joan Muyskenweg 20, NL Select Multiple Objects

Objects List:

	Object ID	Description	Object Site	Model	Location	Address
<input type="checkbox"/>	NLVTZ2097	Ventechi Z series units	209 - Ventechi Netherlands	VTZSR - Ventechi-Z Series	695 - Joan Muyskenweg 20, NL	Joan Muyskenweg ...
<input type="checkbox"/>	NLVTZ2128	Ventechi Z series units	209 - Ventechi Netherlands	VTZSR - Ventechi-Z Series	695 - Joan Muyskenweg 20, NL	Joan Muyskenweg ...

Previous Next Finish Cancel

When defining a scope for a model, consider the following:

- You can only select models that are linked to service objects that have a link to the customer on the program.
- When defining a scope for a model, the program will only include service objects located in the program location.
- When defining a scope for a model, the respective Service Objects connected to the model will be determined upon "Generate Schedule". The system does not check the installation date of the Service Object i.e., it will be included in a service even if the service occurrence date is before the installation date.
- When new Service Objects are created from the model, the **Regenerate Schedule** flag will appear. You won't be able to generate requests until the schedule is updated. This applies to floating schedules as well.

When the scope includes multiple Service Objects or a Model, every Program occurrence will include one Request with one Request Scope per Service Object as shown in this example:

Request 1250 - Recurring service with model 1 of 1

Released

Request ID: 1250 Description: Recurring service with model

Customer: AW NL20101 - Amazing Web Services Zandvoort

General Information

Urgency

Request Classification

REQUEST SCOPE PRICE SUMMARY CONTACTS

New Scope

EU10 - Preventive Maintenance Released

Item ID: NLVTZ2037 - Ventechi Z series units

Object Site: 20 - Ventechi Netherlands

EU10 - Preventive Maintenance Released

Item ID: NLVTZ2040 - Ventechi Z series units

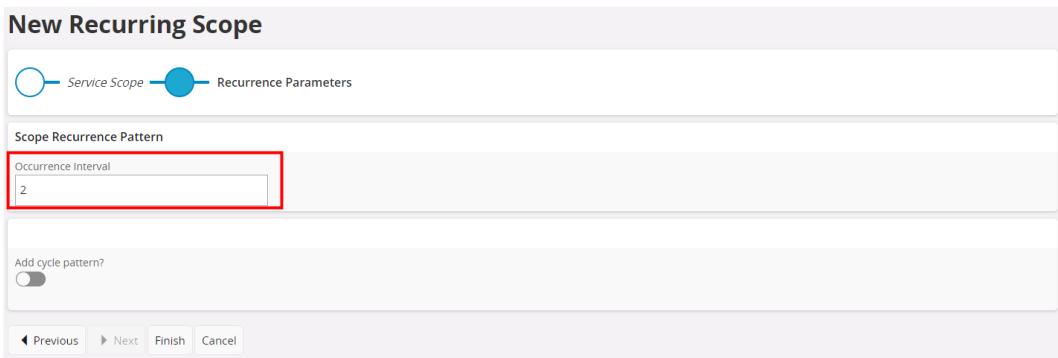
Object Site: 20 - Ventechi Netherlands

EU10 - Preventive Maintenance Released

Item ID: NLVTZ2041 - Ventechi Z series units

Object Site: 20 - Ventechi Netherlands

The **Occurrence Interval** can be used to specify that this specific service does not have to be executed upon every single trigger of the program.



New Recurring Scope

Scope Recurrence Pattern

Occurrence Interval
2

Add cycle pattern?

< Previous Next Finish Cancel

In the example above the program creates a monthly schedule, but service EU10 is only included every 2nd month.

Cycle Patterns

For complex cases in which this approach is not sufficient, Cycle Patterns have been introduced.

GENERAL	SERVICE TRIGGERS	SERVICE SCOPE	STANDARD TASKS	SCHEDULE
<input type="button" value="New Recurring Scope"/> <input type="button" value="Cycle Pattern"/>				
(1)	Recurring Scope	Service	Model	Object Site
<input checked="" type="checkbox"/>	423	EU10 - Preventive Ma...	VTZSR - Ventechi Z Se...	20 - Ventechi Netherl...
				Contract Line
				Occurrence Interval
				Valid From
				Valid To
				Cycle Pattern
				2 7/1/2023 6/30/2024 No

Cycles follow the Interval Type defined on the Recurring Service Program. If the interval type is set to weeks, the cycle will apply to weeks 1, 2, 3,... If set to months, it will apply to months 1, 2, 3,...

Cycle Size specifies the recurrence pattern. We'll use the example of a monthly interval, hence Cycle Size=12 creates a pattern for an entire year. Let's also assume the program starts on Jan 1.

Start Occurrence defines the first occurrence for which Generable will be set to true. When setting Start Occurrence=7 then the months January to June are excluded and the service will start in July.

Once the Start Occurrence has been reached, **Occurrence Interval** applies to the following occurrences. Occurrence Interval=2 would mean that service will take place in July, September, and November.

Finally, **Occurrence Limit** defines the maximum number of occurrences. If set to 2, only July and September would remain.

Cycle Patterns provide the flexibility to also define overlapping services. An example is a monthly service, however when the quarterly service is due there is no need to do monthly as it's already included in the quarterly. Same for the yearly service that includes monthly and quarterly. This could be defined in the following way:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Program Occurrence												
Scope 1 (monthly): Cycle Size=3 Start=1, Interval=1, Limit=2												
Scope 2 (quarterly): Cycle Size=12 Start=3, Interval=3, Limit=3												
Scope 3 (yearly): Cycle Size=12 Start=12, Limit=1												

If even that model is not flexible enough, every occurrence can be manually altered:

Cycle Pattern

Service Scope — Recurrence Parameters — Cycle Pattern

Cycle Parameters

Cycle Size	Start Occurrence	Occurrence Interval	Occurrence Limit
12	1		

Modified **Yes**

Occurrences in Cycle

	Occurrence	Generable
⋮	1	No
⋮	2	Yes
⋮	3	No
⋮	4	No
⋮	5	Yes
⋮	6	Yes
⋮	7	Yes
⋮	8	Yes
⋮	9	No
⋮	10	No
⋮	11	Yes
⋮	12	Yes

Modified indicates that the cycle pattern was individually modified. **Reset to Cycle Parameters** returns the pattern to the settings above. **Remove Cycle Pattern** clears the entire page. Whenever the calendar-based trigger or the cycle pattern have been modified, the system shows a reminder that the schedule needs to be re-generated.

Recurring Service Program SP-NL-0001 - Recurring service ▾ 1 of 1 Preliminary

Program: SP-NL-0001 Description: Recurring service Service Organization: 20 - Servitization Netherlands

Valid From: 7/1/2023 Valid To: 6/30/2024 Package:

Floating Schedule **Regenerate the schedule**

This is done on the **Schedule** tab, which also shows the service scopes for each occurrence.

Service	Model	Service Object	Service Object Site	Generable	Service Scope	Scope Status	Manually Added
EU10 - Preventive Mainter	VTZSR - Ventechi-Z Series	NLVITZ2037 - Ventechi Z...	20 - Ventechi Netherlan...	Yes			No

When using **Combined Triggers**, only the next calendar-based occurrence (**Due Next**) and the test point of the condition (will show "*" if more than one condition exists) are displayed.

Trigger Type	Schedule Status	Due Next	Test Point	Parameter	UoM	Request	Request Status	Request Completed	Manually Changed
Calendar	Generable	7/3/23, 8:00 AM	30 - High side pressur	* 30 - Pressure	bar				

Program Activation and Request Generation

Once the setup is complete, the program needs to be activated.

Trigger Type	Schedule Status	Due Next	Test Point	Parameter	UoM	Request	Request Status	Request Completed
Calendar	Generable	1/16/24, 8:00 AM						
Calendar	Generable	1/21/25, 8:00 AM						
Calendar	Generable	1/20/26, 8:00 AM						

Now it's possible to manually generate Requests. An asterisk (*) in the **Request** column indicates that multiple requests have been created for this program schedule occurrence. When multiple Requests exists for a schedule line, **Request Completed** displays the completion time of the last Request.

Recurring Program Schedule										
<input type="button" value="Generate Schedule"/> <input style="border: 1px solid red; background-color: white; color: black; padding: 2px 10px; border-radius: 5px; margin-right: 10px;" type="button" value="Generate Request"/> 24 										
	(1)	Trigger Type	Schedule Status	Due Next	Test Point	Parameter	UoM	Request	Request Status	Request Completed
	<input checked="" type="checkbox"/>	Calendar	Generable	1/16/24, 8:00 AM						
	<input type="checkbox"/>	Calendar	Generable	1/21/25, 8:00 AM						
	<input type="checkbox"/>	Calendar	Generable	1/20/26, 8:00 AM						

Requests can also be created in batch mode using  **Service Management>Recurring Service>Recurring Service Generation**. Applicable Service Program Schedules can either be limited using calendar filters...

Recurring Service Request Generation

Recurring Service Request generation process will be run as a background job. You will find the status of the job in the Background Jobs page.

Calendar Based
Usage/Condition Based

Date Parameters

Date from
Date to
Schedule Horizon

Selection Parameters

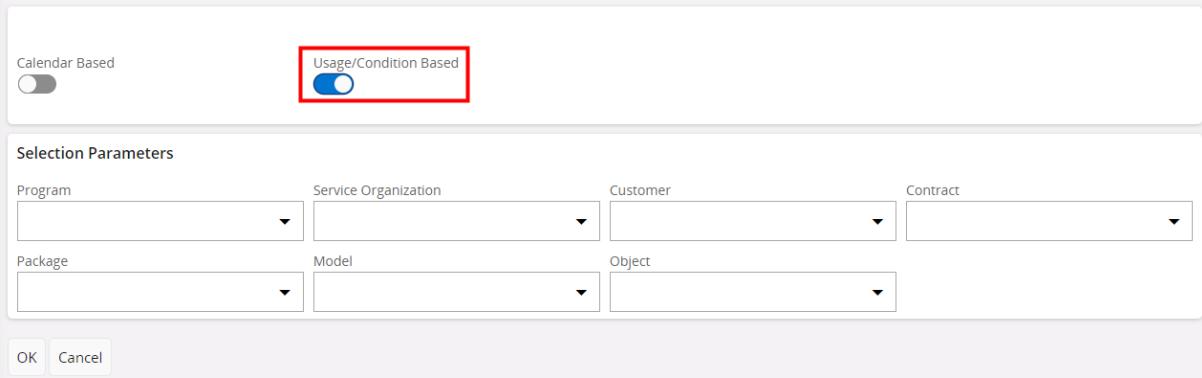
Program <input style="width: 100%; height: 25px; border: 1px solid #ccc;" type="text"/>	Service Organization <input style="width: 100%; height: 25px; border: 1px solid #ccc;" type="text"/>	Customer <input style="width: 100%; height: 25px; border: 1px solid #ccc;" type="text"/>	Contract <input style="width: 100%; height: 25px; border: 1px solid #ccc;" type="text"/>
Package <input style="width: 100%; height: 25px; border: 1px solid #ccc;" type="text"/>	Model <input style="width: 100%; height: 25px; border: 1px solid #ccc;" type="text"/>	Object <input style="width: 100%; height: 25px; border: 1px solid #ccc;" type="text"/>	

OK
Cancel

...or usage/condition-based filters:

Recurring Service Request Generation

Recurring Service Request generation process will be run as a background job. You will find the status of the job in the Background Jobs page.



The dialog box contains the following fields:

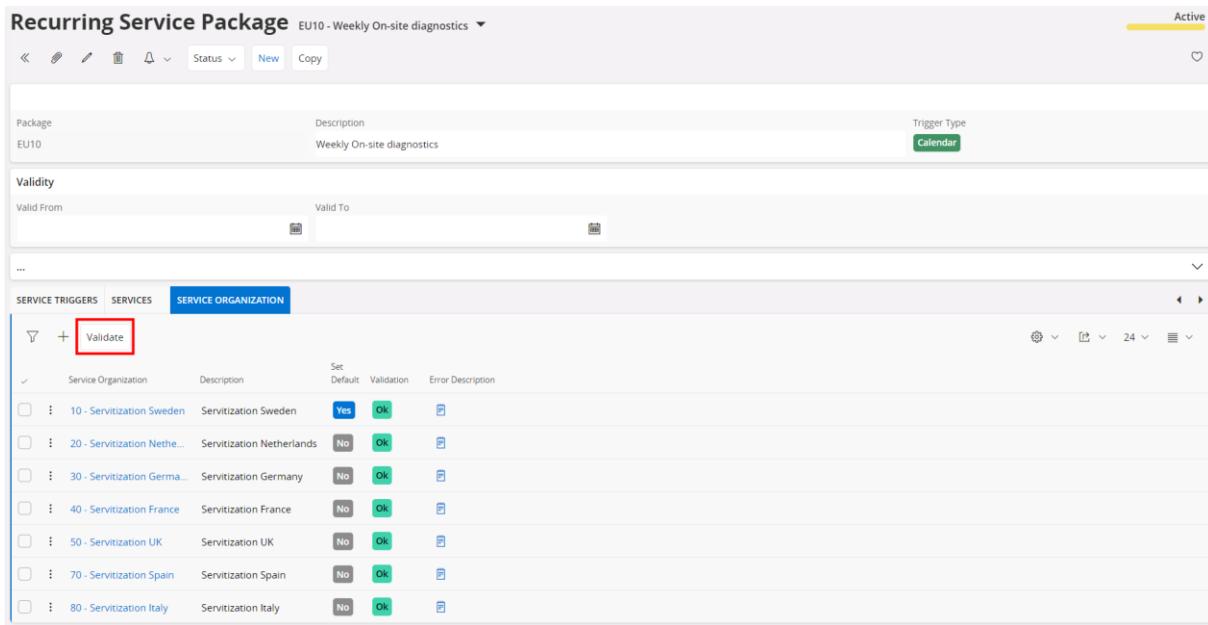
- Calendar Based**: A toggle switch that is off.
- Usage/Condition Based**: A toggle switch that is on, highlighted with a red box.
- Selection Parameters** section:

Program	Service Organization	Customer	Contract
Package	Model	Object	
- OK** and **Cancel** buttons at the bottom.

Recurring Service Packages

 [Service Management>Basic Data>Service Work Basic Data>Recurring Service Package>Recurring Service Package](#)

Recurring Service Packages are templates for recurring services to simplify the creation of the Recurring Service Program. They include the triggers (calendar, usage, and condition), the services and intervals (no cycle patterns), and the service organizations that offer the service. All services connected to the package must be validated against the selected service organizations.



The screen shows the following details:

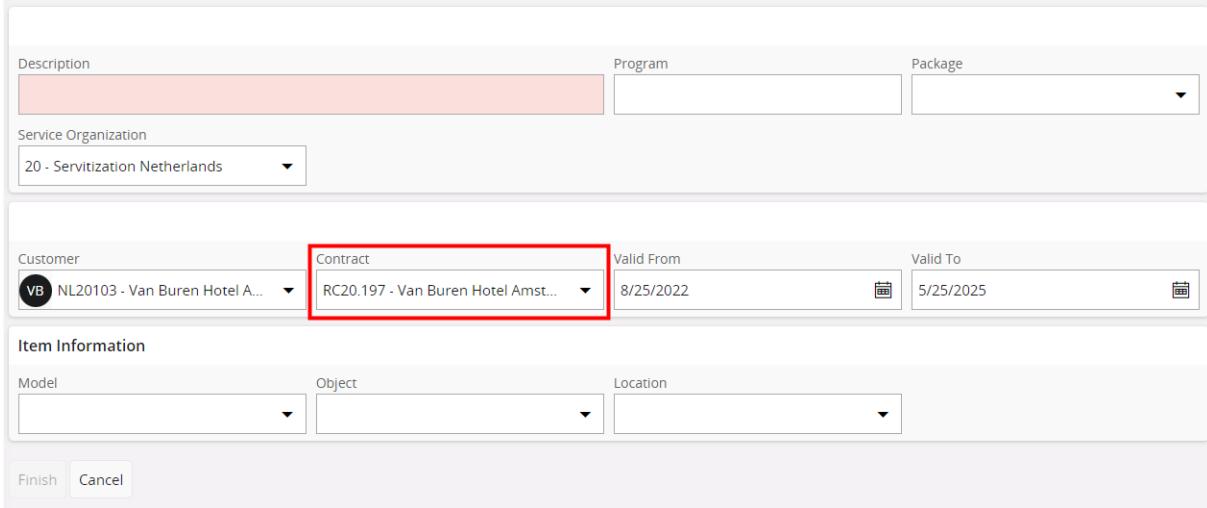
- Recurring Service Package**: EU10 - Weekly On-site diagnostics
- Description**: Weekly On-site diagnostics
- Trigger Type**: Calendar
- Validity** section: Valid From, Valid To
- Service Organization** tab: Shows a list of service organizations with validation status (Yes/No) and validation buttons (Ok/Error). The 'Validate' button is highlighted with a red box.

Service Organization	Description	Set Default	Validation	Error Description
10 - Servitization Sweden	Servitization Sweden	Yes	Ok	
20 - Servitization Neth...	Servitization Netherlands	No	Ok	
30 - Servitization Germa...	Servitization Germany	No	Ok	
40 - Servitization France	Servitization France	No	Ok	
50 - Servitization UK	Servitization UK	No	Ok	
70 - Servitization Spain	Servitization Spain	No	Ok	
80 - Servitization Italy	Servitization Italy	No	Ok	

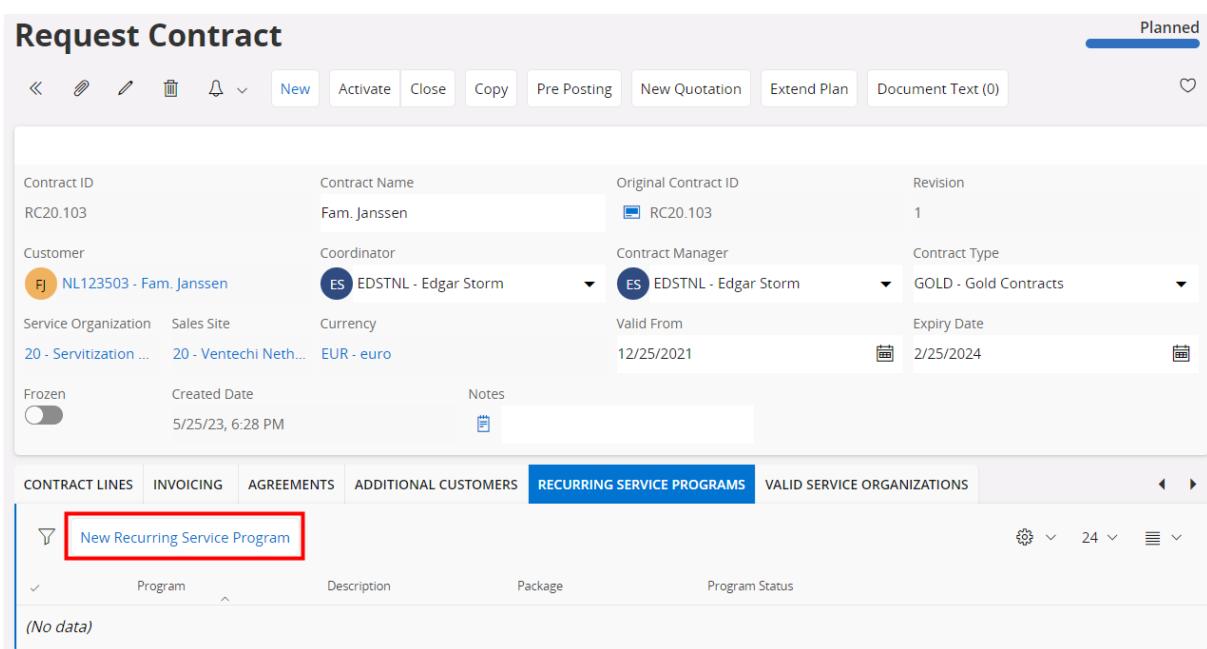
Request Contract for Recurring Services

There are two ways of using Request Contract for Recurring Service programs. Option 1: From the Recurring Service Program, select the Request Contract:

New Recurring Service Program



Option 2: Create a Recurring Service Program from a Request Contract:



Program	Description	Package	Program Status
(No data)			

When there is a Request Contract connected to the Recurring Service Program, the program valid dates are set by valid dates of the Request Contract.

Request Contract should be Active to activate the Recurring Service Program or to generate Requests from contract connected Programs.

Note: When you create Recurring Service Scopes for a Contract Line, you have the option to **Cover all Items**. This does in fact not cover all items for the contract line, but only the top-level items, defined on the contract line (though the label "Cover All Items" implies that the structure would be covered as well). This will be improved in a future release.

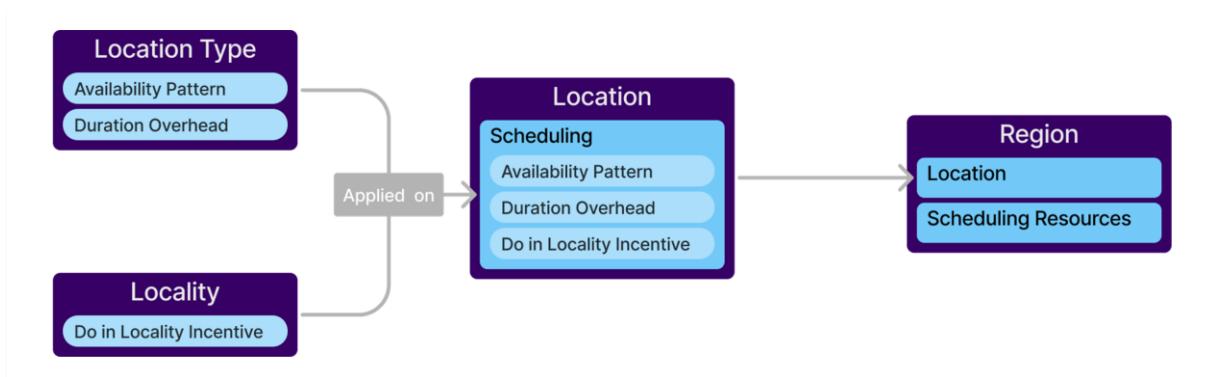
Location data

Concept

Location-based Request Management allows organizations to respond quickly to requests or issues that arise in specific geographic areas to deliver a more accurate and focused service, contributing to overall operational efficiency and improved service delivery.

By efficiently allocating resources based on detailed location information, organizations can increase resource utilization and decrease travel time, fuel consumption and operational costs.

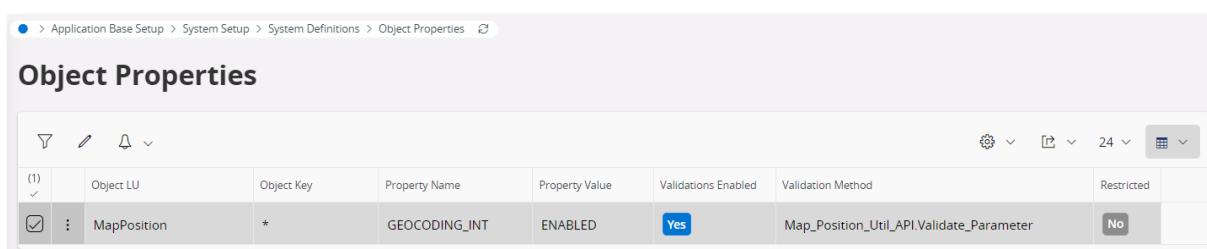
This includes the ability to assign jobs to technicians based on their proximity to service locations and the use of enhanced location data to allocate tasks more efficiently. Location-based recurring services can optimize routes and resource allocation, reducing operational costs.



Locations

 Service Management>Basic Data>General Basic Data>Location and Region>Location

Locations are categorized as either generic or customer-specific location. When they are created (either from the above page or from a customer record), the address will be geocoded. This can be disabled using the Object Property **GEOCODING_INT** maintained at  Application Base Setup>System Setup>System Definitions>Object Properties.



It is also possible to create a map position entry by right-clicking on the map and selecting **Add Position**. Then use **Create/Update Address** to reverse-geocode the address i.e., the system will use the Here Maps API to find the address data and time zone for the map position that is marked as primary.

Note: Create/Update Address is only available for Location Category=Location.

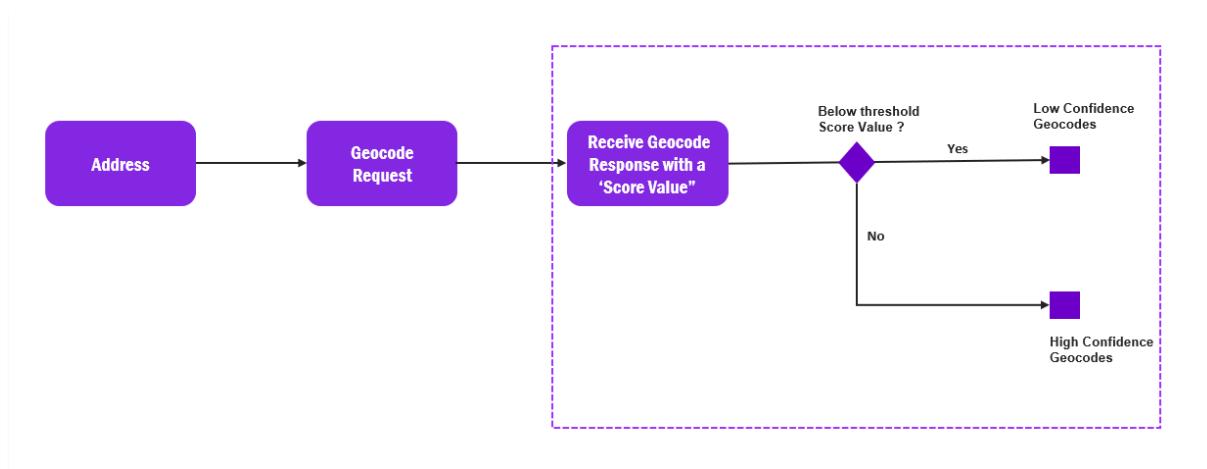
When creating a Request Task, the user can choose from the customer and the equipment locations.

Geocoding Quality

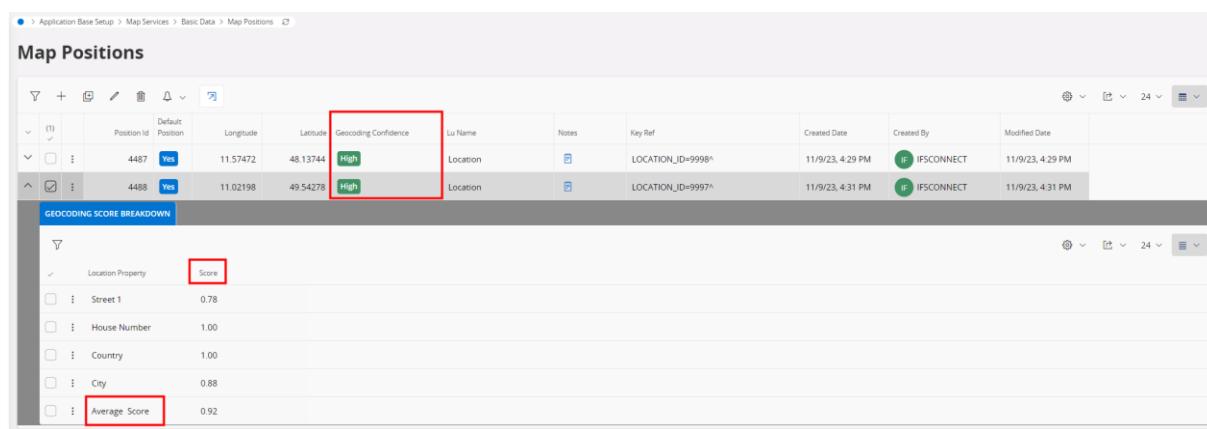
The quality of geocoding can vary depending on the quality of the underlying address data. To ensure consistent quality of geocoding, there should be a review process to receive and analyze the “score-values” that are returned as a part of the geocoding response.

- Makes it possible to analyze historical responses to better understand the overall geocoding quality level.
- Easy identification of lower quality address inputs and/or geocoding results which enables the end users to make a better judgement of a given geocoded result.

The new **Geocoding Score** makes it possible to analyze historical responses to better understand the overall geocoding quality level. Easy identification of lower quality address inputs and/or geocoding results enables end users to make better judgement of a given geocoded result.



Geocoding Scores can be reviewed at  Application Base Setup>Map Services>Basic Data>Map Positions.



Position Id	Default Position	Longitude	Latitude	Geocoding Confidence	Lu Name	Notes	Key Ref	Created Date	Created By	Modified Date
4487	Yes	11.57472	48.13744	High	Location		LOCATION_ID=9998	11/9/23, 4:29 PM	IFSCONNECT	11/9/23, 4:29 PM
4488	Yes	11.02198	49.54278	High	Location		LOCATION_ID=9997	11/9/23, 4:31 PM	IFSCONNECT	11/9/23, 4:31 PM

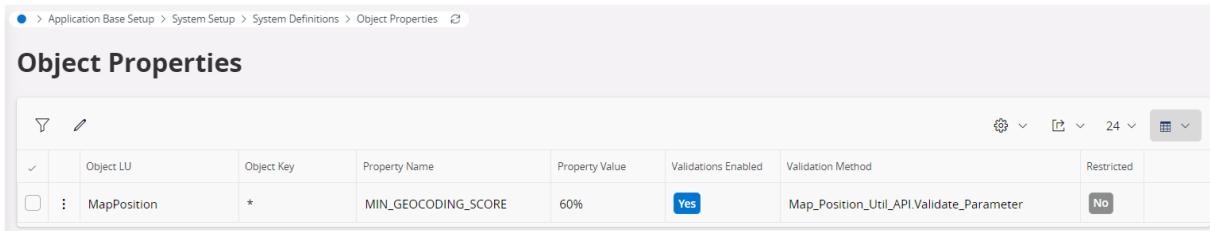
Location Property	Score
Street 1	0.78
House Number	1.00
Country	1.00
City	0.88
Average Score	0.92

Score: An accuracy score given by the geocoding provider (i.e. HERE) for the individual location fields of an address (examples of address fields – country, state, district, city/town, street, house number etc.). An accuracy score can be between 0 (least accurate) and 1 (most accurate). It allows analyzing geocoding responses to better understand the overall level of geocoding quality.

Average Score: Calculated average of all the Geocoding Field Score values given for a specific address, also ranging from 0 to 1.

Geocoding Confidence: A comparison between Average Geocoding Score and Geocoding Threshold. Geocoding Confidence for a given coordinate could be 'High' or 'Low'.

Geocoding Threshold: A basic data threshold is used to highlight the Location Addresses below the acceptable Average Geocoding Score. The threshold is a percentage between 0% and 100%. The threshold is defined using the Object Property **MIN_GEOCODING_SCORE** maintained at  Application Base Setup>System Setup>System Definitions>Object Properties.

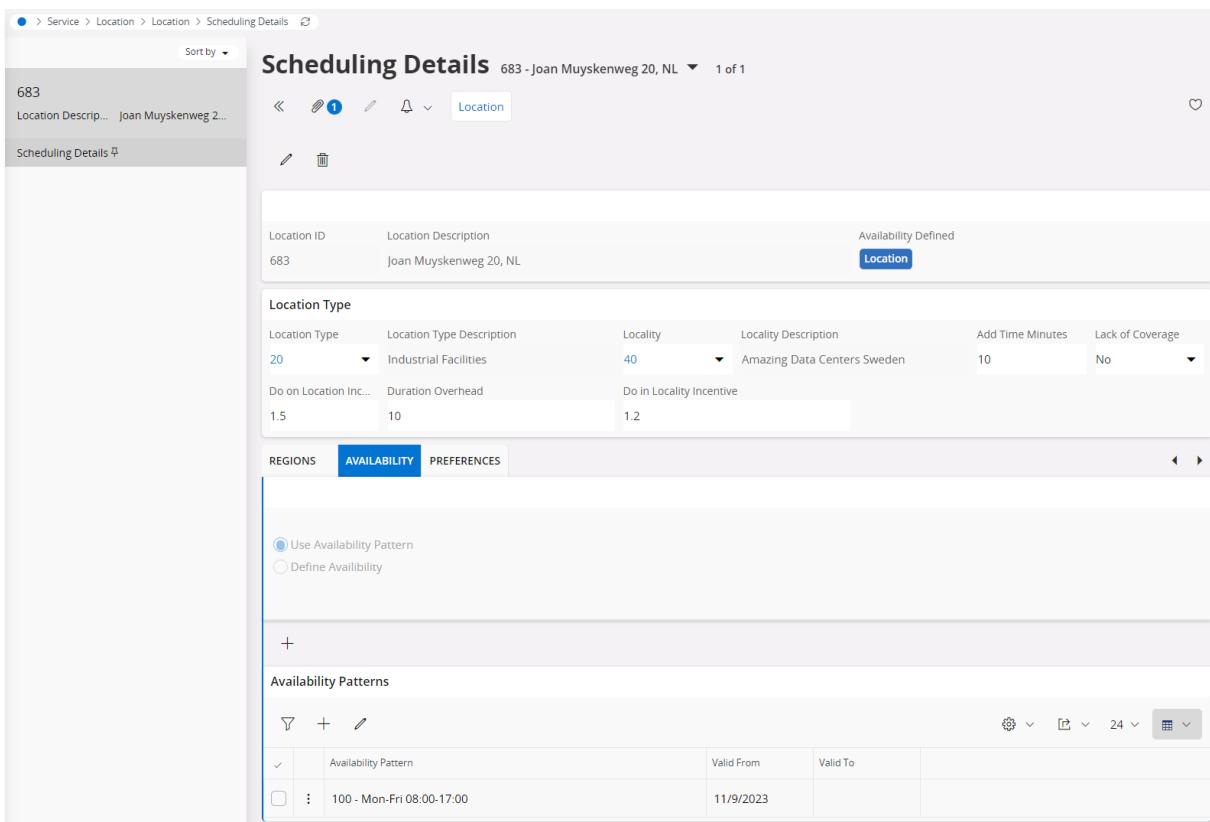


	Object LU	Object Key	Property Name	Property Value	Validations Enabled	Validation Method	Restricted
	MapPosition	*	MIN_GEOCODING_SCORE	60%	Yes	Map_Position_Util_API.Validate_Parameter	No

Location Scheduling Settings

 Service Management>Basic Data>General Basic Data>Location and Region>Location>Scheduling Details

Scheduling details are maintained on the location record itself using the *Scheduling Details* subpage.



Availability Pattern	Valid From	Valid To
100 - Mon-Fri 08:00-17:00	11/9/2023	

Location type (see [Location Types](#)) are used to reduce the amount of information that needs to be registered for each Location. Most of the general information defined on a location can be defined

against the location type. When selecting a Location Type, some attributes get copied over and can be modified on the individual Location.

Locality allows grouping different locations (e.g., a campus).

Add Time Minutes:

Specifies the amount of time to be added to the travel of an activity for gaining access to this location. If two consecutive activities are at the same location, the time is only added to the first travel. Activities are considered to be at the same location if a locality is specified for both locations, and it is the same; or if locality is not specified on one or both locations, and the two location ids are the same.

Lack of Coverage:

This parameter is used to commit a greater number of activities at a location where no network coverage is anticipated (for releasing adjacent jobs). If provided, the Time Horizon parameter or Resource.maximum_committed_activities are overridden when considering commits for activities at a location marked 'lack of coverage'.

Do on Location Incentive:

When there may be more than one activity at a given location (or in a locality) you may specify a preference to do other activities at the same location immediately after the first one. The incentive is a multiplier which applies to the value of the second and subsequent activities of a set of activities at the same location. For instance, if it is set to 1.5, then the second and subsequent activities will have their values increased by 50%, provided that the activities at the same location are all scheduled contiguously.

A soft constraint is set by using a positive value. A value of 1 has no effect. A value greater than 1 makes it more likely that another activity at the same location will be scheduled immediately after this one, by increasing the value of the visits. The value represents the maximum multiplier that may be applied to the visit value when activities at the same location are scheduled together. The actual multiplier applied increases with the total number of same location activities scheduled within a single trip.

If a hard constraint is required, the value of should be set to -1. In this situation whenever a resource is scheduled to arrive at a location, she must carry out all work it is possible for her to do at that time. More specifically, if there is another activity at the location with a do_on_location_incentive of -1, then she must carry out this activity. For more details, please refer to the *PSO Scheduling Schema*.

Note: This parameter is only defined on the location, it cannot be altered on the work task.

Duration Overhead (minutes): Specifies the amount of time to be added to the expected duration of the first activity at a location or locality. If two consecutive activities are at the same location, the time is only added to the first activity. Activities are considered to be at the same location if a locality is specified for both locations, and it is the same; or if locality is not specified on one or both locations, and the two location IDs are the same.

Do In Locality Incentive: Similar to the **Do on Location Incentive**, it defines how activities at the same locality should be scheduled. If the Do In Locality Incentive is not set then the **Do on Location Incentive** will apply for both locations and localities. Recommended values for **Do In Locality Incentive** are -1 or anything between 1 and 2. A value greater than 1 will act as a multiplier.

Regions:

It is possible to associate the location to one or multiple regions (see [Location Regions](#)). If a location is linked to multiple regions, then a qualifying resource must also be linked to all specified regions,

either directly or via a parent region (or the resource's **out of region multiplier** must be greater than 0).

Resource preferences:

It is possible to define that one or several scheduling resources are either excluded, required, preferred or non-preferred when carrying out work at the location. Availability Patterns make it possible to specify a resource preference that's only valid during certain time frames.

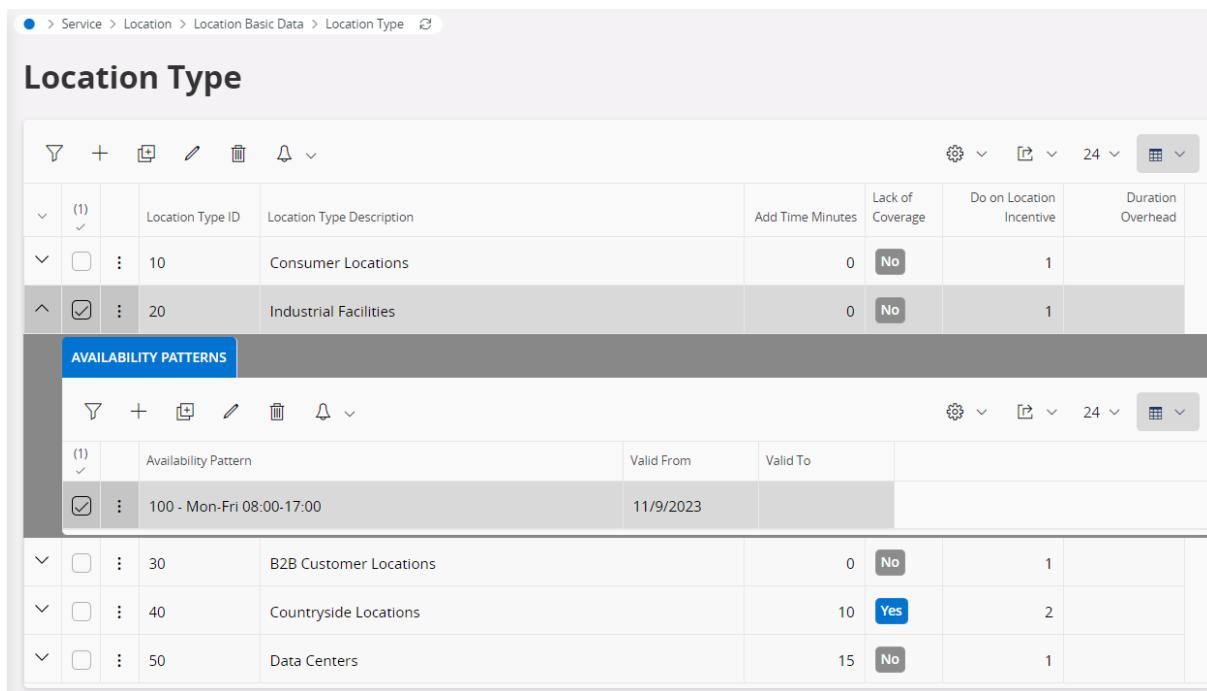
Availability:

Using **Availability Patterns**, it is possible to specify that a location is only available for service at different times. Alternatively, calendar and exception-based availabilities can be used, however from a PSO perspective Availability Patterns should be preferred.

Location Types

 Service Management>Basic Data>General Basic Data>Location and Region>Location Types

Locations can be associated to Location Types, which allow the definition of certain default parameters instead of specifying them for all locations individually.



	(1)	Location Type ID	Location Type Description	Add Time Minutes	Lack of Coverage	Do on Location Incentive	Duration Overhead
▼	<input type="checkbox"/>	10	Consumer Locations	0	No	1	
^	<input checked="" type="checkbox"/>	20	Industrial Facilities	0	No	1	

AVAILABILITY PATTERNS				
	(1)	Availability Pattern	Valid From	Valid To
✓	<input checked="" type="checkbox"/>	100 - Mon-Fri 08:00-17:00	11/9/2023	
▼	<input type="checkbox"/>	B2B Customer Locations	0	No
▼	<input type="checkbox"/>	Countryside Locations	10	Yes
▼	<input type="checkbox"/>	Data Centers	15	No

Localities

 Service Management>Basic Data>General Basic Data>Location and Region>Localities

Locations can also be associated to Localities. Localities are only used by PSO to incentivize bundling work at different locations (e.g., individual shops) that belong to the same locality (e.g., a shopping mall). For details see [Scheduling Demystified](#).

Service Management > Basic Data > General Basic Data > Location and Region > Localities

Localities

Locality ID		Locality Description	Do in Locality	Incentive
<input type="checkbox"/>	10	World Trade Center		
<input type="checkbox"/>	20	Mall of Scandinavia		
<input type="checkbox"/>	30	Kista Science Park		
<input type="checkbox"/>	40	Amazing Data Centers Sweden		

Location Regions

Service Management>Basic Data>General Basic Data>Location and Region>Regions

Locations can be associated to Location Regions, which allow constraining what resources can work at which location.

Service Management > Basic Data > General Basic Data > Location and Region > Regions

Regions

Region ID		Description	Parent Region ID	Parent Region Description	Region Color
<input type="checkbox"/>	11	Ventechi US			
<input type="checkbox"/>	11.01	North	11	Ventechi US	
<input type="checkbox"/>	11.02	South	11	Ventechi US	
<input type="checkbox"/>	11.03	East	11	Ventechi US	
<input type="checkbox"/>	11.04	West	11	Ventechi US	

Use **Details** and the *Locations* tab to associate locations to a region. Use the *Scheduling Resources* tab, to associate resource to that region. Using **Availability Patterns**, it is possible to specify that a resource only serves a region at certain times.

Within Region Multiplier specifies a multiplier on the value of the resource carrying out activities in this region. The value 1 has no effect.

Override Priority defines a precedence order for within region multipliers when multiple values apply to the same activity.

Service Management > Service Management Basic Data > Location > Location Basic Data > Region Details

Region Details 20 - Netherlands 1 of 1

Region ID	Region Description	Parent Region	Region Color
20	Netherlands		[Color Swatch]

LOCATIONS **SCHEDULING RESOURCES**

(1)	Resource ID	Resource Description	Within Region Multiplier	Scheduling Resource ID	Override Priority
<input type="checkbox"/>	BESCNL	Berry Schaars		339	
<input checked="" type="checkbox"/>	ALTONL	Alex Tonen		331	

RESOURCE REGION AVAILABILITY

(1)	Availability Pattern	Valid From	Valid To	Within Region Multiplier	Override Priority
<input checked="" type="checkbox"/>	100		11/9/2023		

Task Location

Request tasks initially receive their location from the request:

316 - Repair Request 1 of 1

New Edit Location Cost and Sales Create Contractor Order Appointment Booking SLA Overview Admin Knowledge Articles (2)

Request ID: 316	Description: *Repair Request	Customer: VB NL20103 - Van Buren Hotel Amsterdam-Amstel	Primary Contact
Request Information		Location and Address	
Contract: RC20.197 - Van Buren Hotel...	SLA Commitments: Commitments Overdue on this Request	Location: 914 - Joan Muyskenweg 20, ...	Address: Joan Muyskenweg 20, Amsterdam, 1096 CJ NL - NETHERLANDS (THE)
Customer Reference	Customer Order Type	Customer Order No	

To change it, click the map pin icon and select **Edit Location**.

The screenshot shows the IFS Cloud interface for a repair request (316). A modal dialog titled 'Edit Location and Address' is open, displaying a location entry for '914 - Joan Muiskenweg 20, NL'. The 'Edit Location' button at the bottom left of the dialog is highlighted with a red box.

From the dialog it is also possible to specify a one-off address using **New Location**. This will create an address specific for that particular task (and geocode it).

The screenshot shows the 'Edit Location and Address' dialog. The 'New Location' toggle switch is turned on, highlighted with a red box. The address field contains 'Joan Muiskenweg 20, Amsterdam, 1096 Cj, NL - NETHERLANDS (THE)'.

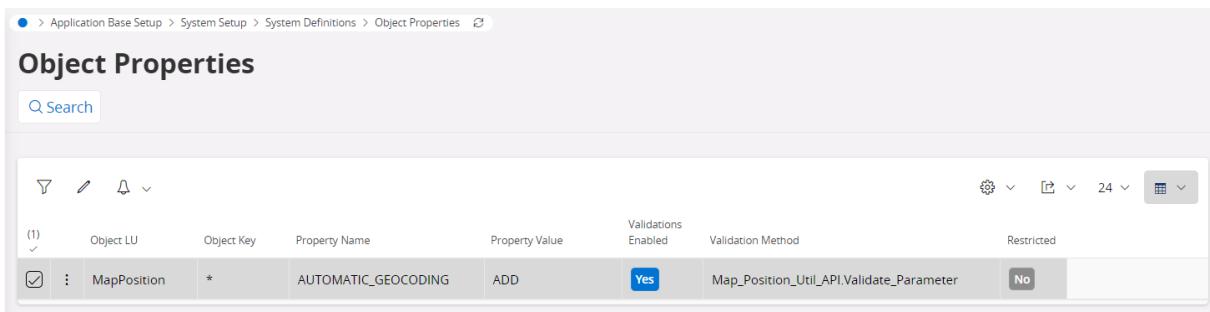
To select an individual location on a work task, use **Edit Location**:

The screenshot shows the IFS Cloud interface for a repair request (316). The 'Edit Location' button in the top navigation bar is highlighted with a red box.

The selection of a defined location (as opposed to defining a map position) allows the use of availabilities, preferences, incentives, etc. For details see [Location Scheduling Settings](#).

Geocoding on Address Updates

When an address is modified, the coordinates can be adjusted automatically. This behavior is managed by the Object Property **AUTOMATIC_GEOCODING** maintained at  Application Base Setup>System Setup>System Definitions>Object Properties. This will ensure that when a user updates an address, the coordinates of the geolocation are also adjusted, keeping everything in sync and consistent.



(1)	Object LU	Object Key	Property Name	Property Value	Validations Enabled	Validation Method	Restricted
<input checked="" type="checkbox"/>	MapPosition	*	AUTOMATIC_GEOCODING	ADD	Yes	Map_Position_Util_API.Validate_Parameter	No

The supported property values are:

- **REPLACE**: When a Location Address is updated, geocoding will be performed, and all existing coordinates will be replaced.
- **ADD**: When a Location Address is updated, geocoding will be performed, and the new coordinates will be added as the default coordinates. Previous Map Position coordinates will remain, but not be the Default. This is the default value.
- **NO_UPDATE**: Geocoding will not be performed when a location address is updated. Coordinates will have to be added/adjusted manually.

Availability Patterns

Prior to the introduction of Availability Patterns some areas in IFS Cloud (e.g., locations) provided the possibility to define calendar-based availabilities that could be used to specify that certain services could only be conducted during certain time periods. These are still available; however the new Availability Patterns were introduced for NGSM with the following benefits and differentiators:

- Availability Patterns can be used to model recurring and repetitive patterns of availability. Availability patterns are processed quicker by the scheduling engine when comparing to individual availabilities.
- For example, a 7-day recurring pattern can be described as 7 similar objects in normal availabilities or as a single object with the availability pattern which makes it easier to express the recurring patterns in this manner.

The biggest differentiator of Availability Patterns compared to the “old” availabilities is that they can be applied to a much greater number of areas:

- Regions (e.g., a resource only works in a specific region on Mondays)
- Skills (e.g., the “Preventative Maintenance” skill is only available in the morning)
- Resource preferences (e.g., resource preference does not apply on Mondays)
- Location Types (e.g., locations of this type are only available for service from Mon to Fri)
- Locations (e.g., location is only available for service from Mon to Thu)
- Equipment Objects (e.g., this equipment can only be services on weekends)
- Appointment Requests (e.g., appointments only on certain weekdays)
- Activities (e.g., “Preventative Maintenance” activities only in the morning)
- Activity Types (e.g., “Preventative Maintenance” activities only in the morning)

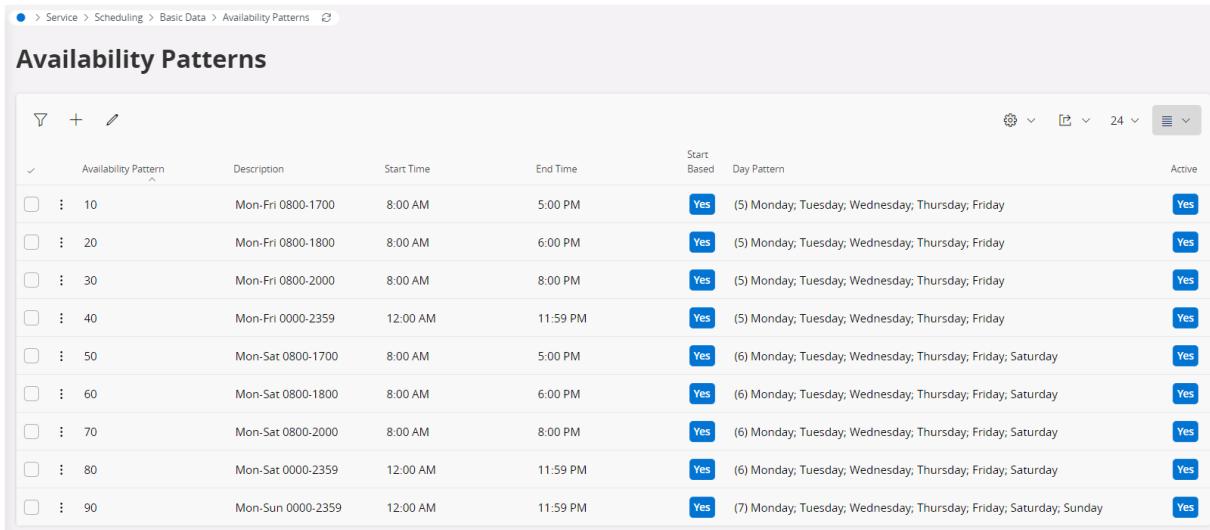
It is also possible to add multiple availability patterns, which enables support for use-cases such as temporary skills or access requirements.

The following tables illustrates possible use areas of “old” availabilities vs. availability patterns.

Area	Availability supported	Availability Pattern supported
Serial Objects	✓	✓
Functional Objects	✓	✓
Service Objects	✓	✓
Work Task	✓	✓
Location	✓	✓
Location Type	✗	✓
Resource Preference	✗	✓
Resource Regions	✗	✓
Resource Skill	✗	✓
Resource Skill Level	✗	✓
Scheduling Activity Type	✗	✓
Appointment Request	✗	✓

Define Availability Patterns

Service Management>Basic Data>Service Work Basic Data>Service Scheduling Basic Data>Scheduling Basic Data>Availability Patterns



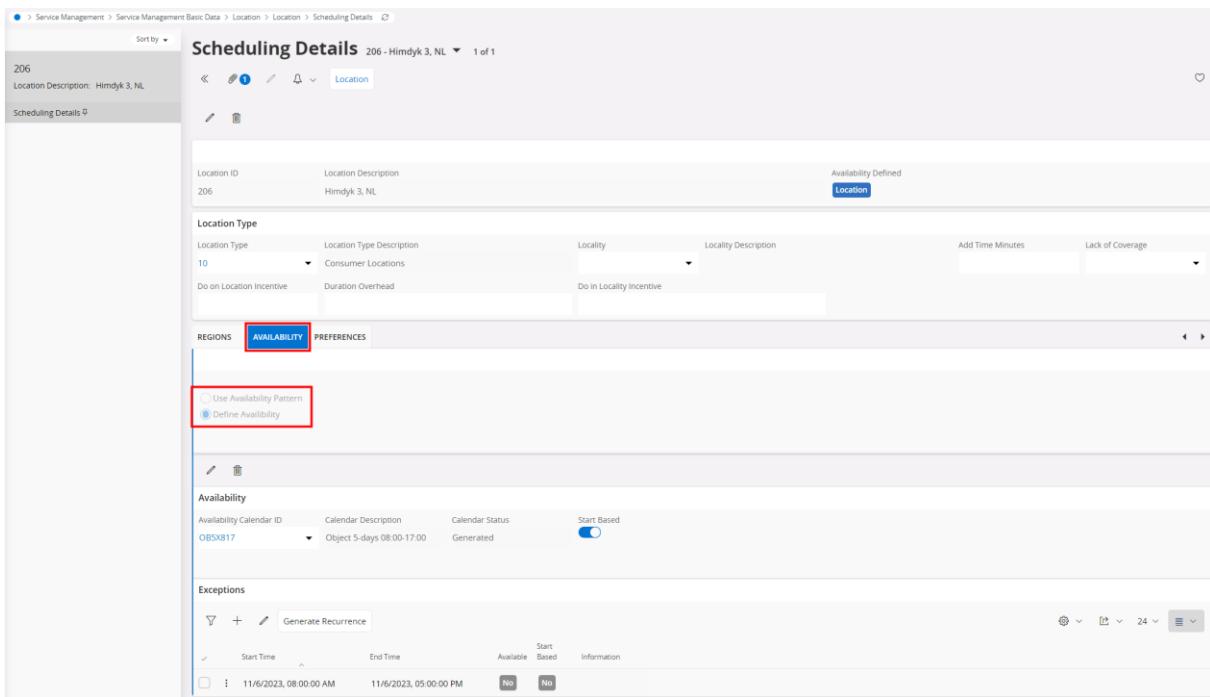
	Availability Pattern	Description	Start Time	End Time	Start Based	Day Pattern	Active
<input type="checkbox"/>	10	Mon-Fri 0800-1700	8:00 AM	5:00 PM	<input checked="" type="checkbox"/> Yes	(5) Monday; Tuesday; Wednesday; Thursday; Friday	<input checked="" type="checkbox"/> Yes
<input type="checkbox"/>	20	Mon-Fri 0800-1800	8:00 AM	6:00 PM	<input checked="" type="checkbox"/> Yes	(5) Monday; Tuesday; Wednesday; Thursday; Friday	<input checked="" type="checkbox"/> Yes
<input type="checkbox"/>	30	Mon-Fri 0800-2000	8:00 AM	8:00 PM	<input checked="" type="checkbox"/> Yes	(5) Monday; Tuesday; Wednesday; Thursday; Friday	<input checked="" type="checkbox"/> Yes
<input type="checkbox"/>	40	Mon-Fri 0000-2359	12:00 AM	11:59 PM	<input checked="" type="checkbox"/> Yes	(5) Monday; Tuesday; Wednesday; Thursday; Friday	<input checked="" type="checkbox"/> Yes
<input type="checkbox"/>	50	Mon-Sat 0800-1700	8:00 AM	5:00 PM	<input checked="" type="checkbox"/> Yes	(6) Monday; Tuesday; Wednesday; Thursday; Friday; Saturday	<input checked="" type="checkbox"/> Yes
<input type="checkbox"/>	60	Mon-Sat 0800-1800	8:00 AM	6:00 PM	<input checked="" type="checkbox"/> Yes	(6) Monday; Tuesday; Wednesday; Thursday; Friday; Saturday	<input checked="" type="checkbox"/> Yes
<input type="checkbox"/>	70	Mon-Sat 0800-2000	8:00 AM	8:00 PM	<input checked="" type="checkbox"/> Yes	(6) Monday; Tuesday; Wednesday; Thursday; Friday; Saturday	<input checked="" type="checkbox"/> Yes
<input type="checkbox"/>	80	Mon-Sat 0000-2359	12:00 AM	11:59 PM	<input checked="" type="checkbox"/> Yes	(6) Monday; Tuesday; Wednesday; Thursday; Friday; Saturday	<input checked="" type="checkbox"/> Yes
<input type="checkbox"/>	90	Mon-Sun 0000-2359	12:00 AM	11:59 PM	<input checked="" type="checkbox"/> Yes	(7) Monday; Tuesday; Wednesday; Thursday; Friday; Saturday; Sunday	<input checked="" type="checkbox"/> Yes

Each pattern contains **Start Time** and **End Time** of the availability and the days of the week the pattern should apply to. The **Start Based** flag will determine whether the only the allocation start or the entire allocation should fall into the availability window. As an example, suppose a 1-hour job has availability from 9:00-17:00, and is scheduled at 16:30. If Start Based=**Yes**, this is a valid allocation, if Start Based=**No** the allocation would violate the constraint since the activity will not be completed until after the availability has ended.

Specify Availability

Note: The toggle **Define Availability/Use Availability Pattern** is only available in areas where both capabilities are supported (see table above).

In the respective area (in this case Location) availabilities are defined on the *Availability* tab. Setting the toggle to **Define Availability** allows the definition of the availability based on a calendar. Click the **+** button and select a calendar.



The screenshot shows the 'Scheduling Details' page for location 206. The 'Availability' tab is active. A red box highlights the 'Use Availability Pattern' and 'Define Availability' buttons. The 'Availability' section shows a calendar definition for 'OBSX817'.

The **Exceptions** list allows the user to specify additional availabilities and non-availabilities that are added on top of the calendar definition.

To switch from **Define Availability** to **Use Availability Pattern** the defined Availability needs to be removed first.

Specify Availability Patterns

Note: The toggle **Define Availability/Use Availability Pattern** is only available in areas where both capabilities are supported (see table above).

In the respective area (in this case Location) availabilities are defined on the *Availability* tab. Setting the toggle to **Use Availability Pattern** allows the association of one or multiple Availability Patterns defined above.

Service Management > Service Management Basic Data > Location > Location > Scheduling Details

Scheduling Details

206 - Himdyk 3, NL | 1 of 1

Sort by ▾

Location Description: Himdyk 3, NL

Scheduling Details

Location ID	Location Description	Availability Defined
206	Himdyk 3, NL	Location

Location Type

Location Type	Location Type Description	Locality	Locality Description	Add Time Minutes	Lack of Coverage
10	Consumer Locations				
Do on Location Inc...	Duration Overhead	Do in Locality Incentive			

REGIONS **AVAILABILITY** PREFERENCES

Use Availability Pattern
 Define Availability

+

Availability Patterns

(1)	Availability Pattern	Valid From	Valid To
<input checked="" type="checkbox"/>	20 - Mon-Fri 0800-1800	1/1/2023	12/31/2024

To switch from **Use Availability Pattern** to **Define Availability** all patterns need to be removed first.

In areas that only support Availability Patterns (in this case Location Type) expand the respective row and associate the patterns.

Service Management > Service Management Basic Data > Location > Location Basic Data > Location Type

Location Type

(1)	Location Type ID	Location Type Description	Add Time Minutes	Lack of Coverage	Do on Location Incentive	Duration Overhead
<input checked="" type="checkbox"/>	10	Consumer Locations	0	No	1	

AVAILABILITY PATTERNS

✓	Availability Pattern	Valid From	Valid To
<input type="checkbox"/>	60 - Mon-Sat 0800-1800	10/30/2023	

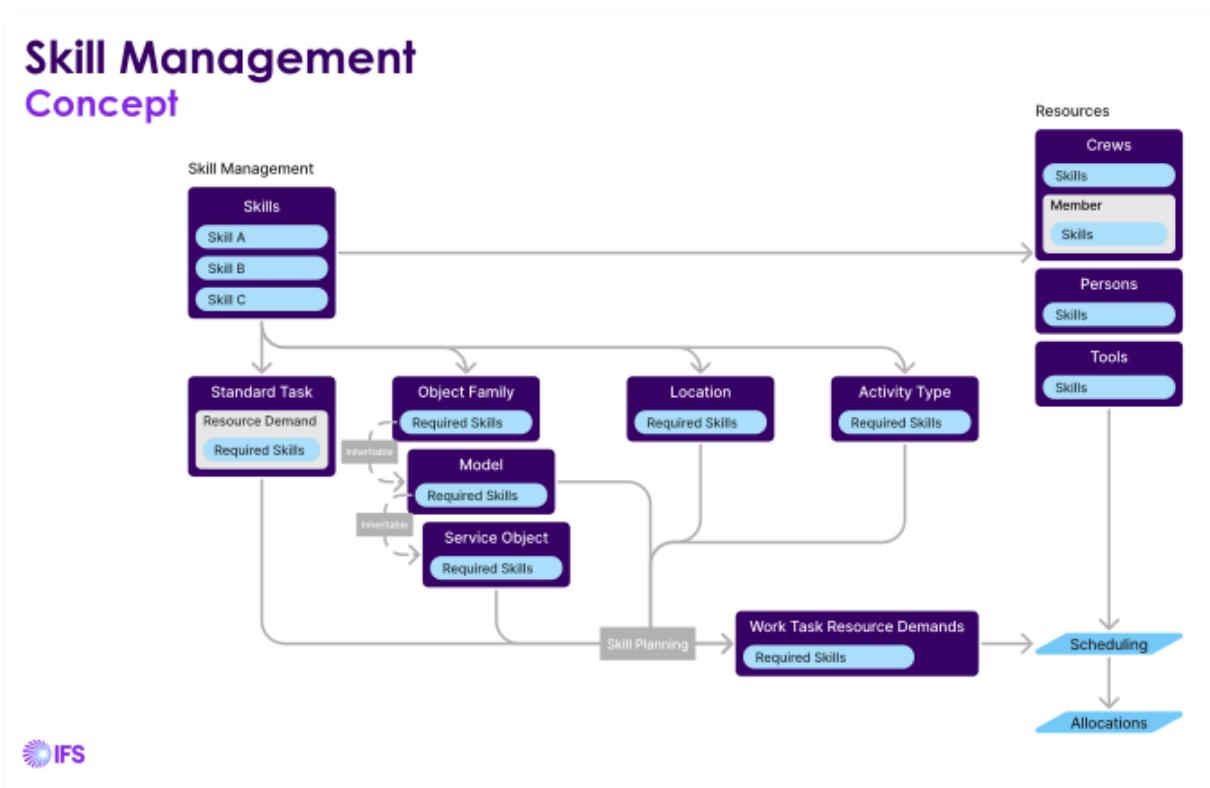
<input type="checkbox"/>	20	Industrial Facilities	0	No	1	
<input type="checkbox"/>	30	B2B Customer Locations	0	No	1	
<input type="checkbox"/>	40	Countrysides Locations	10	Yes	2	
<input type="checkbox"/>	50	Data Centers	15	No	1	

Skills

While the use of Certificates and Competencies from IFS Cloud's HCM module is possible, a new Skill Management was introduced for NGSM with the following benefits and differentiators:

- Better use of PSO's skill-related features (such as in-use cost and multipliers)
- Skills can be applied directly to a resource (not indirectly to a person or employee like certificates and competencies)
- Definition of availability patterns i.e., a resource only possesses a skill during a certain timeframe.
- Inheritance of skills from crew members to crews (including the availability patterns).

The following graphic shows the concept and explains where the “new” skills can be used:



Define Skills

📁 Resource Management>Skill Management>Skill

Skills						
	Skill ID	Skill Description	Skill Type	Inheritable To Crew	In Use Cost	In Use Multiplier
<input type="checkbox"/>	1100	Building Management System Controls	10 - HVAC Skills	<input checked="" type="checkbox"/> Yes		
<input type="checkbox"/>	1110	HVAC cooling estimations	10 - HVAC Skills	<input checked="" type="checkbox"/> Yes		
<input type="checkbox"/>	1200	Fiber Optic Installation and Splicing	20 - Telco Skills	<input checked="" type="checkbox"/> Yes		
<input type="checkbox"/>	1210	Knowledge of Telecoms Standards and Regulations	20 - Telco Skills	<input checked="" type="checkbox"/> Yes		
<input type="checkbox"/>	1220	Network Configuration and Integration	20 - Telco Skills	<input checked="" type="checkbox"/> Yes		
<input type="checkbox"/>	1230	Network Troubleshooting and Diagnostics	20 - Telco Skills	<input checked="" type="checkbox"/> Yes		
<input type="checkbox"/>	1240	RF Testing and Optimization	20 - Telco Skills	<input checked="" type="checkbox"/> Yes		
<input type="checkbox"/>	1250	Telecommunications Equipment Installation	20 - Telco Skills	<input checked="" type="checkbox"/> Yes		
<input type="checkbox"/>	1300	Field Safety and Emergency Procedures	30 - Safety and Compliance Skills	<input checked="" type="checkbox"/> Yes		
<input type="checkbox"/>	1310	Quality Assurance and Compliance	30 - Safety and Compliance Skills	<input checked="" type="checkbox"/> Yes		
<input type="checkbox"/>	1320	Safety and Compliance	30 - Safety and Compliance Skills	<input checked="" type="checkbox"/> Yes		

Field	Explanation
Skill Type	Used to group skill, see Skill Types .
Inheritable to Crew	Defines whether the skill is inheritable from crew members to crews. Crew Member Skill Inheritable Rule and Crew Member Level Consideration Rule controls how skills and levels should be inherited to a crew when members are added.
In Use Cost	The cost to apply when the skill is available at the time and being used.
In Use Multiplier	Specifies the multiplier on the value of the skill being available and in use.
Not In Use Cost	The cost to apply when the skill is available at the time but not being used.
Not In Use Multiplier	Specifies the multiplier on the value of the skill being available and not in use.
Skill Level	Description of the skill levels e.g., junior, senior, expert. Select the Details button to access the definition of skill levels.
Skill Level Point	<p>Skill Level Point is used to rank Skill Levels. The higher the Skill Level Point, the greater the level of expertise. An example of how the skill level points may be used:</p> <p>Junior - Skill Level Point 10 Proficient - Skill Level Point 20 Expert - Skill Level Point 30</p> <p>It is often a good idea to setup the level points with a gap between them, to allow for additional levels to be inserted at a later stage.</p>

Screenshot of the IFS Skill Management interface showing a skill detail view for 'Skill 1100 - Building Management System Controls'.

Skill Details:

- Skill ID: 1100
- Skill Description: Building Management Syst...
- Inheritable To Crew: Yes
- Skill Type: 10 - HVAC Skills

Scheduling Information:

In Use Cost	In Use Multiplier	Not In Use Cost	Not In Use Multiplier
-------------	-------------------	-----------------	-----------------------

Skill Level Points:

Skill Level	Skill Level Point	Description
40	2	Starter
30	3	Average
20	4	Good
10	5	Very Good

Skills are also available when defining requirements for Resource Groups.

Screenshot of the IFS Service Resource Details interface showing a requirement definition for a resource group.

Service Resource Details:

Resource ID: 20.10
Resource Description: Ventechi Servitization Europe
Resource Type: Structure

Requirements Tab:

Requirement Source	Group	Requirement ID	Requirement Description	Operator	Requirement Value	Value Description
<input checked="" type="checkbox"/> Skills	10	1100	Building Management System Controls	= (Equal To)	20	20

Ignore as Scheduling Constraint: No (highlighted with a red box)

If the **Ignore as Scheduling Constraint** flag is set on the resource group, the resource group will not be transferred to PSO as a skill constraint, and only the site and skills specified will be used to find resources. This enables the organization of resources without imposing this structure as a fixed scheduling constraint.

For more information, please refer to [Scheduling Demystified](#).

Skill Types

Resource Management>Skill Management>Skill Types

Skill types can be used to group skills.

Skill Types

Y + - Delete Bell V Hide Block Translation			
(1)	Skill Type ID	Description	Validity
<input checked="" type="checkbox"/>	HVACS	Hvac Certificate Skills	Active
<input type="checkbox"/>	TECHS	Tech Skills	Active
<input type="checkbox"/>	BASICS	Basic Skills	Active

Skill Templates

Resource Management > Skill Management > Skill Templates

Skill Templates can be used to apply multiple skills to a Resource or a Work Task. Skill templates include the skills and their skill levels.

Y + - Delete Bell V Sort by Translation Hide Block																								
Skill Template 20 - HVAC working at heights																								
10	Descript... High level multilingual HVAC ...	Description	Validity																					
<input checked="" type="checkbox"/>	Active	20	HVAC working at heights																					
20	Description: HVAC working at heights	Description	Validity																					
<input checked="" type="checkbox"/>	Active	30	High level Telco engineer																					
30	Description: High level Telco engineer	Description	Validity																					
<input checked="" type="checkbox"/>	Active	40	Telco working at heights																					
40	Description: Telco working at heights	Description	Validity																					
<input checked="" type="checkbox"/>	Active	50	Network specialist																					
50	Description: Network specialist	Description	Validity																					
<input checked="" type="checkbox"/>	Active	Skill Template <table border="1"> <thead> <tr> <th>Skill Type</th> <th>Skill</th> <th>Skill Level</th> <th>Skill Level Point</th> </tr> </thead> <tbody> <tr> <td>10 - HVAC Skills</td> <td>1100 - Building Management System Controls</td> <td>20</td> <td>4</td> </tr> <tr> <td>10 - HVAC Skills</td> <td>1110 - HVAC cooling estimations</td> <td>20</td> <td>4</td> </tr> <tr> <td>60 - Communication</td> <td>1630 - English language</td> <td>20</td> <td>4</td> </tr> <tr> <td>40 - Licenses</td> <td>1400 - Working at heights</td> <td></td> <td></td> </tr> </tbody> </table>			Skill Type	Skill	Skill Level	Skill Level Point	10 - HVAC Skills	1100 - Building Management System Controls	20	4	10 - HVAC Skills	1110 - HVAC cooling estimations	20	4	60 - Communication	1630 - English language	20	4	40 - Licenses	1400 - Working at heights		
Skill Type	Skill	Skill Level	Skill Level Point																					
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10 - HVAC Skills	1110 - HVAC cooling estimations	20	4																					
60 - Communication	1630 - English language	20	4																					
40 - Licenses	1400 - Working at heights																							

Translating Skills

When using IFS Cloud in multiple languages, it is possible to translate all skill data so that users see it in their selected application language. This is achieved using the Basic Data Translation feature of IFS Cloud. In the following example the skills administrator uses the English client to create a new skill.

Y + - Delete Translation							
Skill ID	Skill Description	Skill Type	Inheritable To Crew	In Use Cost	In Use Multiplier	Not In Use Cost	Not In Use Multiplier
9000	Driving License	40 - Licenses	<input checked="" type="checkbox"/>				

This skill will be displayed to end users regardless of which language they have selected.

ARBEITSSCHRITTE RESSOURCEN MATERIAL

Ressourcenliste

▼ + ☰ 🔍

▼ (1) Bedarfstyp Ressourcengruppe

^ ☐ Mitarbeiter 41-10-02 - Field Workforce

FÄHIGKEITEN KOMPETENZ ZERTIFIKAT ANWENDBARKEIT

▼ + ☰ 🔍 Anwendbarkeit Fähigkeitenvorlage übernehmen

	Qualifikationen ID	Fähigkeit	Fähigkeitsniveau	Voraussetzung für gemeinsame Nutzung	Anwendbarkeit
<input checked="" type="checkbox"/>	40 - Licenses	9000 - Driving License		Nein	All

Navigate to *My Administration>Basic Data Translation*. Two entries for the newly created skill have been added automatically.

Sort by ▾

SKLMGT Logical Unit: Skill

SKLMGT Logical Unit: SkillLevel

SKLMGT Logical Unit: SkillTemplate

SKLMGT Logical Unit: SkillType

Basic Data Translation SKLMGT - Skill ▾ 1 of 4

« 🔍 ⌂ Copy Installation Text to Text for chosen Module and Logical Unit

Basic Data Translation

Module: SKLMGT Logical Unit: Skill Use Translation: Yes Show Prog Langu...: Yes

Translations

	Attribute Key	Language Code	Text	Installation Text	System Defined
<input type="checkbox"/>	9000	PROG	Driving License	Driving License	No
<input type="checkbox"/>	9000	en	Driving License	Driving License	No

Create new entries for the desired target language(s).

Translations

▼ + ☰ 🔍 ⌂ Copy Installation Text to Text

	Attribute Key	Language Code	Text	Installation Text	System Defined
<input type="checkbox"/>	9000	PROG	Driving License	Driving License	No
<input type="checkbox"/>	9000	en	Driving License	Driving License	No
<input checked="" type="checkbox"/>	9000	de	Fahrerlaubnis	Driving License	No

After this change, the translation becomes available in the client immediately.

FÄHIGKEITEN	KOMPETENZ	ZERTIFIKAT	ANWENDBARKEIT		
Y + □ ✎ ✖ 🔔 ▼ Anwendbarkeit Fähigkeitenvorlage übernehmen					
(1) ✓	Qualifikationen ID	Fähigkeit	Fähigkeitsniveau	Voraussetzung für gemeinsame Nutzung	Anwendbarkeit
<input checked="" type="checkbox"/> :	40 - Licenses	9000 - Fahrerlaubnis		Nein	All

Basic Data Translation is available for Skills, Skill Levels, Skill Templates, and Skill Types.

Apply Skills to a Resource

📁 Service Management>Basic Data>Organizational Basic Data>Service Resource>Service Resource Details

Skill are applied to resources using the **Skills** tab.

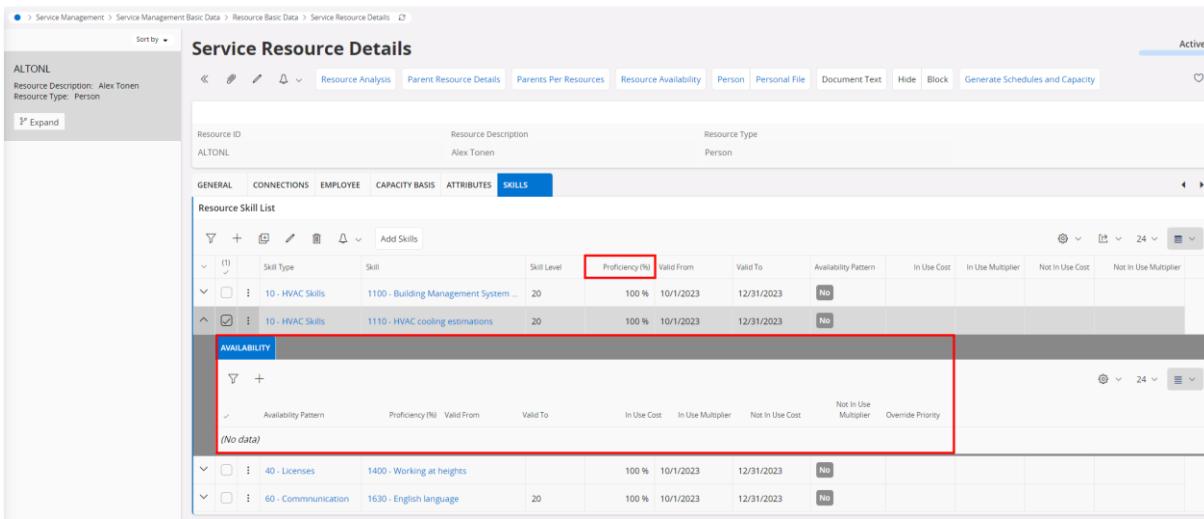
Use **+** to add individual skills and **Add Skills** to add multiple skills as well. These can be selected from a list, which can be filtered using Skill Templates. It's also possible to specify a **Valid From** and a **Valid To**, which will be applied to all resource skill rows that are created. **Include Lower Levels** will automatically add skills with lower Skill Level Points.

Note: The ENABLE_SKILL_HIERARCHY parameter does not apply to the NGSM skills, only to certificates and competencies. That means if PSO should consider lower levels (e.g., Senior Electrician skill should also include Junior Electrician skill, both need to be explicitly listed under the Resource).

Proficiency (%) specifies the level of the resource's proficiency in the given skill.

- 100% is normal speed i.e., a job with a planned duration of 1 hour would take 1 hour.
- 50% is half as quick i.e., a job with a planned duration of 1 hour would take 2 hours.
- 200% is twice as quick i.e., a job with a planned duration of 1 hour would take 30 minutes.
- 0% is equivalent to the resource not having the skill.

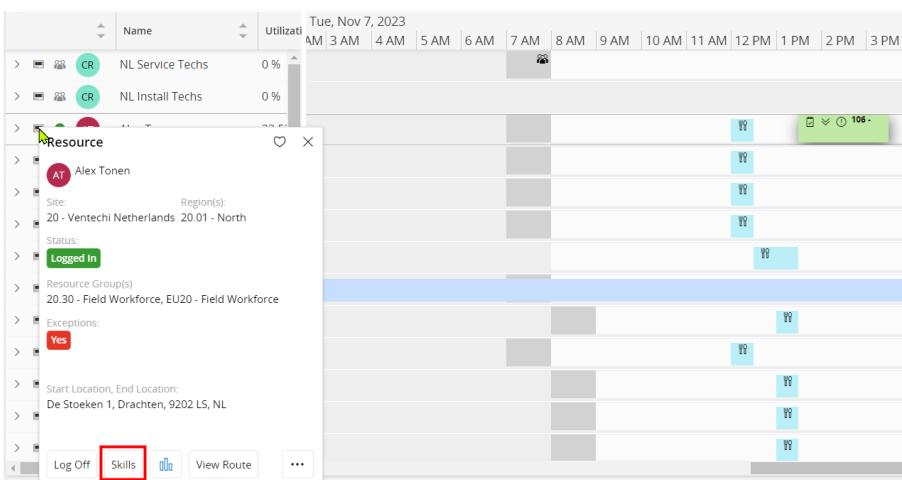
The weakest proficiency takes precedence. So if a job requires two skills: A and B, and a resource has skill A with proficiency 200% and skill B with proficiency 50%, the overall proficiency for the resource would be 50%. This means it would take the resource twice as long to carry out the work. If the proficiency is not specified for a particular resource skill, then this is ignored from the proficiency calculation.



The screenshot shows the 'Service Resource Details' page for a resource named 'ALTONL'. The 'Skills' tab is selected. In the 'Resource Skill List' table, there are two entries under 'Skill Type': '10 - HVAC Skills' and '10 - HVAC Skills'. The second entry has its 'Proficiency (%)' field highlighted with a red box. Below the table, the 'AVAILABILITY' section is expanded, also with a red box around it. It shows a table with columns: Availability Pattern, Proficiency (%), Valid From, Valid To, In Use Cost, In Use Multiplier, Not In Use Cost, Not In Use Multiplier, and Override Priority. The message '(No data)' is displayed.

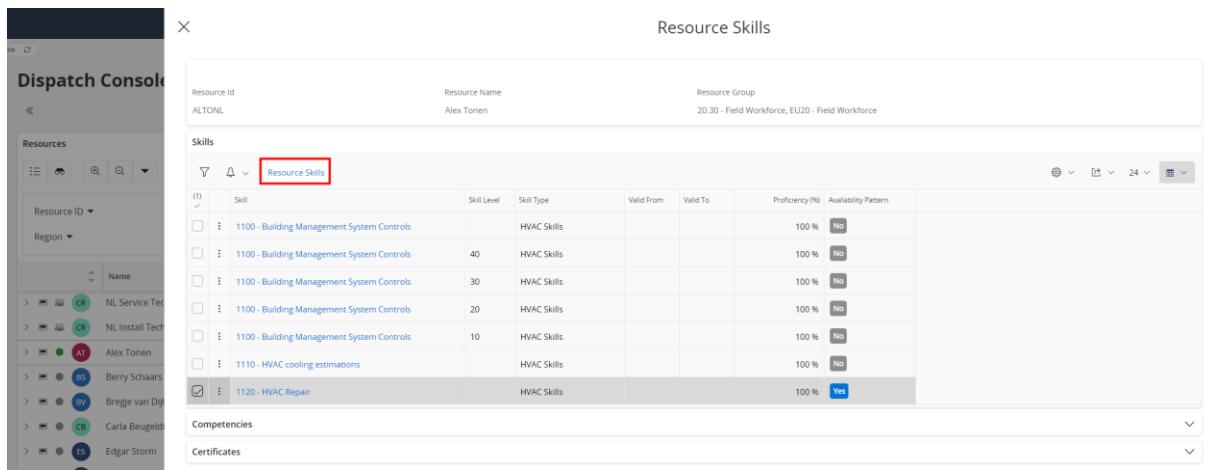
The **Availability Pattern** flag indicates that a resource only possesses a skill during certain time frames defined by **Availability Patterns** (e.g., only on Mondays). This is defined by expanding the skill line, in addition it is possible to overwrite the skill's default In-Use and Not-In-Use parameters per availability entry.

When skills are defined for a resource, the resource tooltip on the Dispatch Console will show a **Skills** button...



The screenshot shows the Dispatch Console interface. On the left, a sidebar displays resource details: 'NL Service Techs' and 'NL Install Techs' both at 0% utilization. Below this, the 'Resource' section shows 'Alex Tonen' (AT) is logged in. The 'Exceptions' section has a 'Yes' button. At the bottom of the sidebar are buttons for 'Log Off', 'Skills' (which is highlighted with a red box), 'View Route', and '...'. The main area shows a timeline for Tuesday, November 7, 2023, with various tasks scheduled throughout the day.

...that opens a panel with resource skills (along with Competencies and Certificates defined in IFS Cloud HCM). The **Resource Skills** button can be used to review availability patterns (if defined) of a specific skill.



Skill	Skill Level	Skill Type	Valid From	Valid To	Proficiency (%)	Availability Pattern
1100 - Building Management System Controls		HVAC Skills			100 %	No
1100 - Building Management System Controls	40	HVAC Skills			100 %	No
1100 - Building Management System Controls	30	HVAC Skills			100 %	No
1100 - Building Management System Controls	20	HVAC Skills			100 %	No
1100 - Building Management System Controls	10	HVAC Skills			100 %	No
1110 - HVAC cooling estimations		HVAC Skills			100 %	No
1120 - HVAC Repair		HVAC Skills			100 %	Yes

Apply a Skill to a Crew

Resource Management>Resource>Resource Crew

Crews themselves can possess skills. This is defined on the *Skills* tab and works the same way as for individual resources. In addition, it is possible for a crew to inherit skills from its members. This is visualized on the *Skill Summary* tab through the **Inherited** flag.

There are three pre-requisites for skill inheritance:

- **Inherit Member Skills** must be set to **Yes** on the Crew.
- On the skill, **Inheritable To Crew** must be set to **Yes**.
- In addition there are the two parameters below maintained at *Resource Management>Skill Management>Skill Basic Data*.

Skill Inheritable Type controls how skills should be inherited to crews when members are added.

- All Members: Only inherit the skill if all members have the same skill.
- All Persons: Only inherit the skill if all person resources have the same skill.
- All Tools: Only inherit the skill if all tools have the same skills.
- Any Member: Inherit the skills of any of the members.

Skill Level Consideration Rule controls how the skill levels should be handled when skills are inherited from a Crew Member to a Crew.

- Ignore: Inherit the skills and ignore skill levels.
- Consider: Inherit the skill including their level (match the level).
- Min Level: Inherit the lowest skill level only.

Resource Crew CR10.01 - SE Service Techs - EU40.10 ▾ 1 of 1

Crew ID	Description	Crew Group	Start Location
CR10.01	SE Service Techs	EU40.10	
End Location			

Skill Settings

Inherit Member Skills	<input checked="" type="checkbox"/>
-----------------------	-------------------------------------

PERIODS PLANNED MEMBERS MEMBER DEVIATION CREW LEADER LEADER DEVIATION GENERAL COST SKILLS SKILL SUMMARY

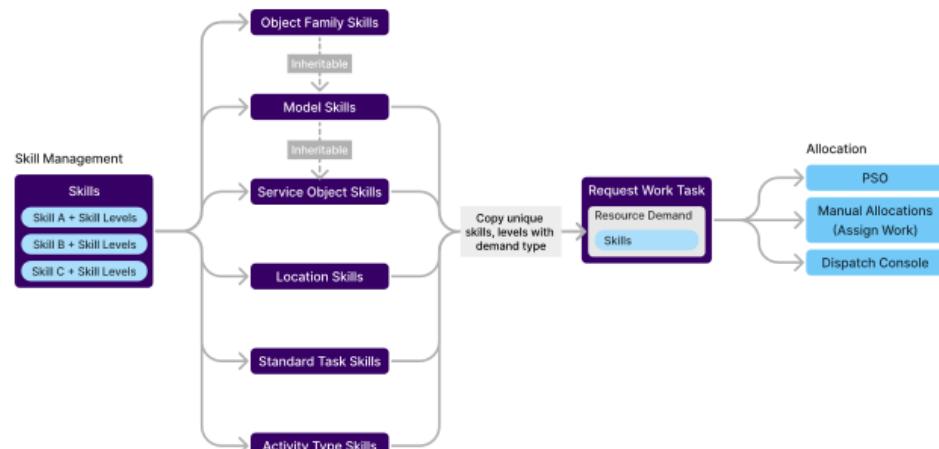
Crew Skill Summary List

Skill ID	Skill Level	Proficiency (%)	Valid From	Valid To	Availability Pattern	Inherited
1100 - Building Management System Controls	30	100 %	10/23/2023	10/30/2023	No	<input checked="" type="checkbox"/>

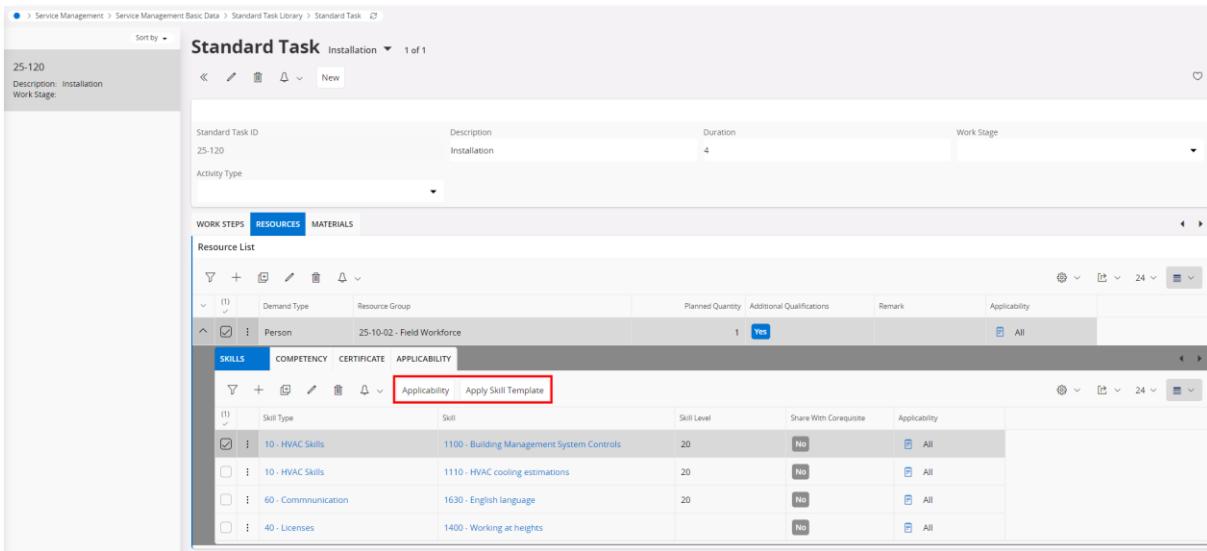
Skill Demand

Skill requirements may be documented in several locations.

Skill Management – Skill Planning and Management Concept



Skills on Standard Tasks

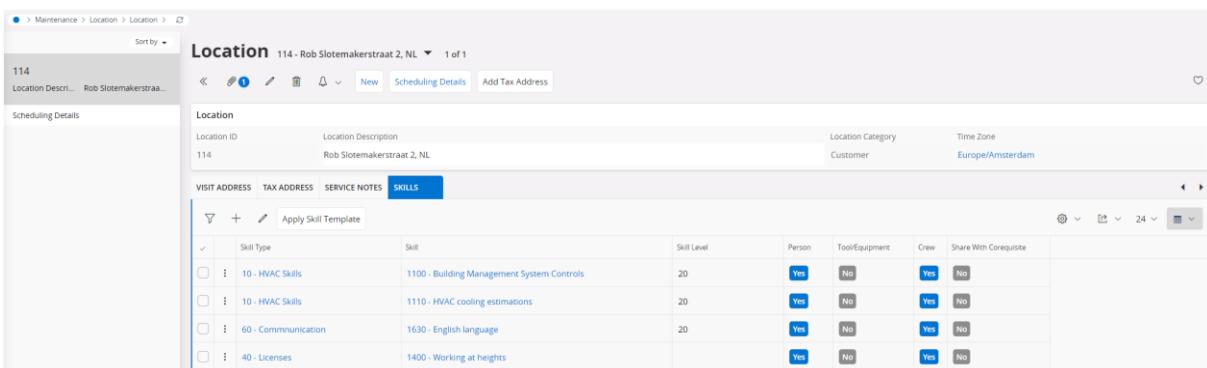


Skill Type	Skill	Skill Level	Share With Corequisite	Applicability
10 - HVAC Skills	1100 - Building Management System Controls	20	No	All
10 - HVAC Skills	1110 - HVAC cooling estimations	20	No	All
60 - Communication	1630 - English language	20	No	All
40 - Licenses	1400 - Working at heights	20	No	All

The **+** button allows the addition of a single skill, using **Apply Skill Template** multiple required skills can be added at once. When skill requirements are not universally applicable to all types of assets, it is possible to define specific applicability conditions.

Share with Corequisite indicates whether all resources performing a group of tasks must have the required skills, or if one skilled resource is sufficient.

Skills on Locations



Skill Type	Skill	Skill Level	Person	Tool/Equipment	Crew	Share With Corequisite	Applicability
10 - HVAC Skills	1100 - Building Management System Controls	20	Yes	No	Yes	No	All
10 - HVAC Skills	1110 - HVAC cooling estimations	20	Yes	No	Yes	No	All
60 - Communication	1630 - English language	20	Yes	No	Yes	No	All
40 - Licenses	1400 - Working at heights	20	Yes	No	Yes	No	All

Skills for Object Family/Subfamily

Skills can be specified for an Object Family and – on the *Object Subfamily* tab – also for sub-families.

Service Management > Installed Base > Basic Data > Object Family

Object Family 50 - Solar Energy and Heating

Object Family	Description
50	Solar Energy and Heating

OBJECT SUBFAMILIES **SKILLS**

Skills

Object Subfamily 55

Skill Type	Skill	Skill Level	Person	Tool/Equipment	Crew	Share With Corequisite	Object Subfamily
I - 40 - Licenses	1400 - Working at heights	10	Yes	Yes	Yes	No	55
I - 10 - HVAC Skills	1100 - Building Management System Controls	10	Yes	No	Yes	No	55
I - 10 - HVAC Skills	1110 - HVAC cooling estimations	10	Yes	No	Yes	No	55

Competencies

Certificates

Skills for Models

Skills can be specified for models, **Inherited** denotes if the skill requirement is inherited from the Object Family/Subfamily. **Exclude** allows the de-activation of an inherited skill.

Service Management > Installed Base > Model

Model VTZSR - Ventechi-Z Series

Model ID	Description	Object Family
VTZSR	Ventechi-Z Series	10 - Inverters

Image Model VTZSR

Object Subfamily

Brand	Serialized
VENTECHI - Ventechi HVAC	Yes

DETAILS **SKILLS** **WARRANTIES**

Skills

Show Applicable Apply Clear Settings

Skill Type	Skill	Skill Level	Person	Tool/Equipment	Crew	Share With Corequisite	Inherited	Excluded
I - 10 - HVAC Skills	1100 - Building Manage...	20	Yes	Yes	Yes	No	Yes	No
I - 10 - HVAC Skills	1110 - HVAC cooling est...	20	Yes	Yes	Yes	No	Yes	No

Competencies

Certificates

Skills for Service Objects

Skills can be specified for models, **Inherited** denotes if the skill requirement is inherited from the Object Model. **Exclude** allows the de-activation of an inherited skill.

Service Object NLVTZ2097 - Ventechi Z series units 1 of 1

Service Information	Model	Object ID	Description	Operational Status	Operational Condition	Object Classification
NLVTZ2097 Description: Ventechi Z series units Object Site: 209 - Ventechi Netherlands In Operation	VTZSR - VENTECHI-Z SERIES	NLVTZ2097	Ventechi Z series units	In Operation	Operational	Serial
Material Information	Location & Address	Primary Customer				
Scheduling Details	695 - Joan Muyskenweg 20, NL					
History						

DETAILS SKILLS WARRANTIES PARTIES SERVICE NOTES

Skills

Apply Skill Template

Show Applicable Apply Clear Settings

Skill Type	Skill	Skill Level	Person	Tool/Equipment	Crew	Share With Corequisite	Inherited	Excluded
10 - HVAC Skills	1100 - Building Management System Controls	20	Yes	Yes	Yes	No	Yes	No
10 - HVAC Skills	1110 - HVAC cooling estimations	20	Yes	Yes	Yes	No	Yes	No

Competencies Certificates

Skills for Activity Types

Activity Types can be used to classify different types of work on Request Work Tasks. Activity Type can have pre-defined skill requirements and availability patterns.

Activity Types

Activity Type	Description	Validity
Corrective Maintenance		Active

SKILLS AVAILABILITY PATTERNS

Apply Skill Template

Skill Type	Skill	Skill Level	Person	Tool/Equipment	Crew	Share With Corequisite
10 - HVAC Skills	1100 - Building Management System Controls	10	Yes	No	Yes	No
10 - HVAC Skills	1110 - HVAC cooling estimations	10	Yes	No	Yes	No

Skills for Request Tasks

Required Skills can be specified on the individual task's resource demand by selecting **Additional Qualifications**.

Request Work Task 1 - Corrective Maintenance 1 of 1

Task Details	Location and Address
Task No: 1 Description: Corrective Maintenance Created Date: 11/6/23, 6:46 PM Scope: Customer	Location: 695 Address: joan Muyskenweg 20 1096 CJ Amsterdam NL Open Map
Item Details	Task Dates
Task Attributes	
Planning and Scheduling	

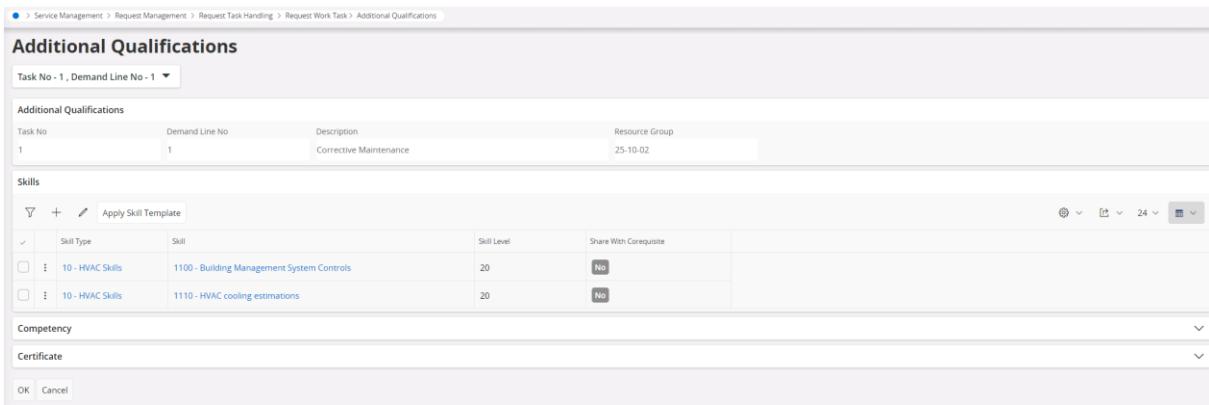
ASSIGNMENTS RESOURCES STEPS MATERIAL RETURNS SLA TIME REPORTS PLANNED COST AND SALES COSTS SALES SERVICE NOTES SIGN OFF REQUIREMENTS

Demand

Additional Qualifications

Demand Line No	Demand Type	Resource Group	Resource	Planned Quantity	Cost	Overhead Cost	Cost Amount	Sales Part	Unit Sales Price/Base	Unit Sales Price/Curr	Discount %	Additional Qualifications
1	Person	25-10-02 - Field Workf		1	100.00	0.00	200.00					Yes
Rental												

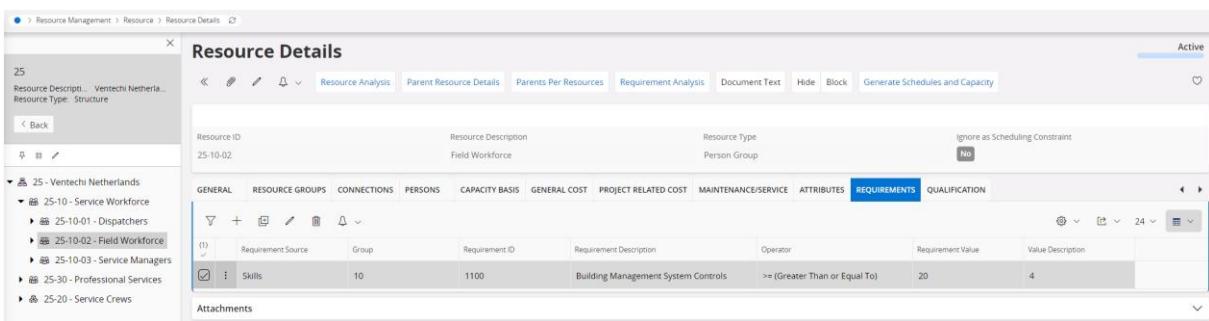
The list will show all skills inherited from the above entities with the possibility to delete and add new ones.



This screenshot shows the 'Additional Qualifications' dialog box. At the top, it displays 'Task No - 1 , Demand Line No - 1'. Below this, there's a table with columns: Task No, Demand Line No, Description, and Resource Group. One row is shown with Task No 1, Demand Line No 1, Description 'Corrective Maintenance', and Resource Group '25-10-02'. Under the 'Skills' section, there's a table with columns: Skill Type, Skill, Skill Level, and Share Wtr Corequisite. Two rows are listed: '10 - HVAC Skills' with Skill '1100 - Building Management System Controls' and Skill Level '20', and '10 - HVAC Skills' with Skill '1110 - HVAC cooling estimations' and Skill Level '20'. Both rows have 'No' in the 'Share Wtr Corequisite' column. Below the skill table, there are sections for 'Competency' and 'Certificate', both of which are currently empty. At the bottom, there are 'OK' and 'Cancel' buttons.

Skill Requirements for Resource Groups

 Service Management>Basic Data>Organizational Basic Data>Service Resource>Service Resource Details, Requirements tab.



This screenshot shows the 'Resource Details' screen for resource ID '25-10-02'. The left sidebar shows a hierarchy of resources, including '25 - Ventechi Netherlands' and its sub-groups like '25-10 - Service Workforce' and '25-10-02 - Field Workforce'. The main panel has tabs for 'GENERAL', 'RESOURCE GROUPS', 'CONNECTIONS', 'PERSONS', 'CAPACITY BASIS', 'GENERAL COST', 'PROJECT RELATED COST', 'MAINTENANCE/SERVICE', 'ATTRIBUTES', 'REQUIREMENTS' (which is selected), and 'QUALIFICATION'. In the 'REQUIREMENTS' tab, there's a table with columns: Requirement Source, Group, Requirement ID, Requirement Description, Operator, Requirement Value, and Value Description. One requirement is listed: 'Skills' with Group '10', Requirement ID '1100', Description 'Building Management System Controls', Operator ' \geq (Greater Than or Equal To)', Value '20', and Value Description '4'. At the bottom, there's an 'Attachments' section.

Miscellaneous Resource Allocations

Miscellaneous Resource Allocations (MRA) can be used to reflect non-availability of a resource and/or to capture technician times that are not related to work tasks e.g., to capture illness, training, or vacation.

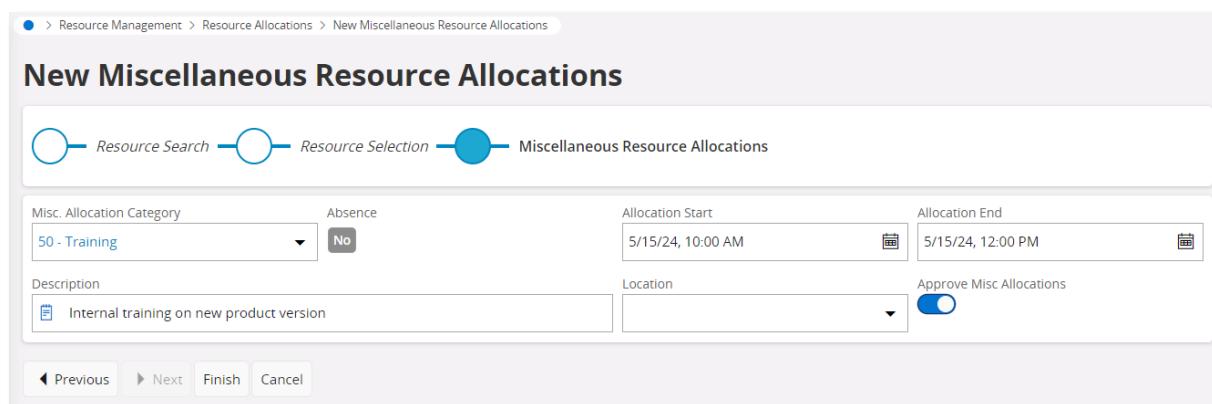
MRA - Misc. Resource Allocations (25R1)

 *Resource Management>Resource Allocations>My Miscellaneous Resource Allocations* (for the logged-in user only)

 *Resource Management>Resource Allocations>Miscellaneous Resource Allocations* (where an administrator can register MRAs for one or multiple resources)

Note: MRAs are created without any company or site associated and there is no integration to IFS Cloud Human Capital Management (HCM).

MRAs may be registered either by users themselves (in both the web client and MWO) or by managers and administrators, who have the ability to register MRAs for one or more resources.



MRAs can have a location (e.g., a training venue), which allows Dispatch Console (DC) and PSO to consider them during route calculation/optimization. MRAs are sent to PSO immediately (even before approval) to make sure that the resources' time is blocked as quickly as possible when they become unavailable.

Both MRAs and Recurring MRAs are also shown on the resource record.

Service Resource Details

Search (1)

Sort by: Active

ALTONL
Resource Description: Alex Tonen
Resource Type: Person

MRA

Resource ID	Resource Description	Resource Type	User
ALTONL	Alex Tonen	Person	ALTONL - Alex Tonen

Note:

CONNECTIONS SCHEDULE BASIS CAPACITY BASIS SCHEDULING SALES ATTRIBUTES SKILLS MRA HR ABSENCE SUMMARY

Misc. Allocation Category	Absence	Description	Location	Allocation Start	Allocation End	Align with Schedule	Self Reset State	Recurring MRA ID	Status
30 - Garage	No	Garage Visit		5/5/25, 8:00 AM	5/5/25, 9:00 AM	No	No	2	Approved
30 - Garage	No	Garage Visit		5/6/25, 8:00 AM	5/6/25, 9:00 AM	No	No	2	Approved
30 - Garage	No	Garage Visit		5/7/25, 8:00 AM	5/7/25, 9:00 AM	No	No	2	Approved
30 - Garage	No	Garage Visit		5/8/25, 8:00 AM	5/8/25, 9:00 AM	No	No	2	Approved
30 - Garage	No	Garage Visit		5/9/25, 8:00 AM	5/9/25, 9:00 AM	No	No	2	Approved

MRA categories are maintained at **Resource Management>Basic Data>Miscellaneous Resource Allocation Categories**. The **Use in Scheduling** flag defines whether they are sent to PSO. Note that the flag is changed using **Use in Scheduling/Exclude from Scheduling**, not using Edit mode.

When **Allow Resource to Reset Status** is set to True for an MRA Category, the MWO user can remove the approval to make changes.

Note: This only applies to categories that can be used when creating MRAs in PSO. An MRA created in the web client will be sent to PSO regardless of the category setting.

Resource Management > Basic Data > Miscellaneous Resource Allocation Categories

Search

Hide Block Translation Use In Scheduling

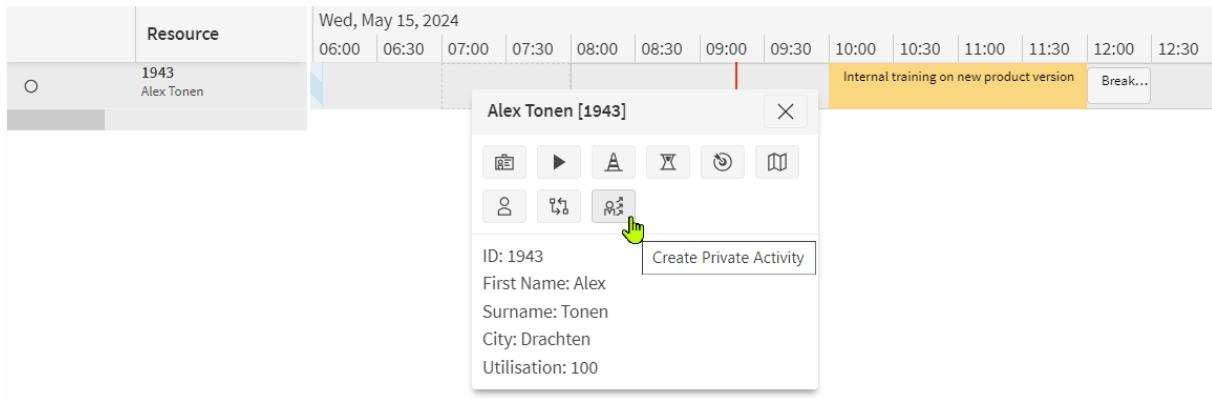
Misc. Allocation Category	Category Description	Absence	Use In Scheduling	Allow Resource to Reset Status	Validity
10	Illness	Yes	No	No	Active
20	Vacation	Yes	No	No	Active
30	Garage	No	No	No	Active
40	Medical visit	No	No	No	Active
50	Training	Yes	No	Yes	Active

The Scheduling Configuration Parameter (**Service>Scheduling>Basic Data>Scheduling Configuration**) **SEND_MRA_DESCRIPTION=Yes** will send the description to PSO, otherwise they will only be displayed as "MISC RESOURCE ALLOCATION". Note that PSO will show the Category field, not the Category Description.

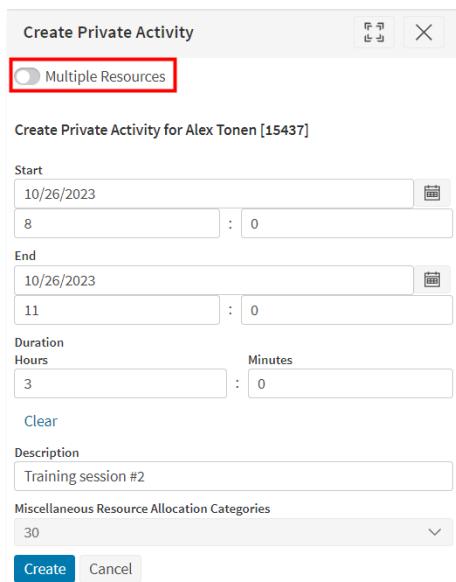
MRA display in PSO:

	Resource	Wed, May 15, 2024																
		06:00	06:30	07:00	07:30	08:00	08:30	09:00	09:30	10:00	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00
O	1943 Alex Tonen																	

Creation of new MRAs in PSO:



MRAs are created as “Private Activities” and it’s possible to register them for multiple resources.



Create Private Activity

Multiple Resources

Create Private Activity for Alex Tonen [15437]

Start
10/26/2023

8 : 0

End
10/26/2023

11 : 0

Duration
Hours Minutes
3 : 0

[Clear](#)

Description
Training session #2

Miscellaneous Resource Allocation Categories
30

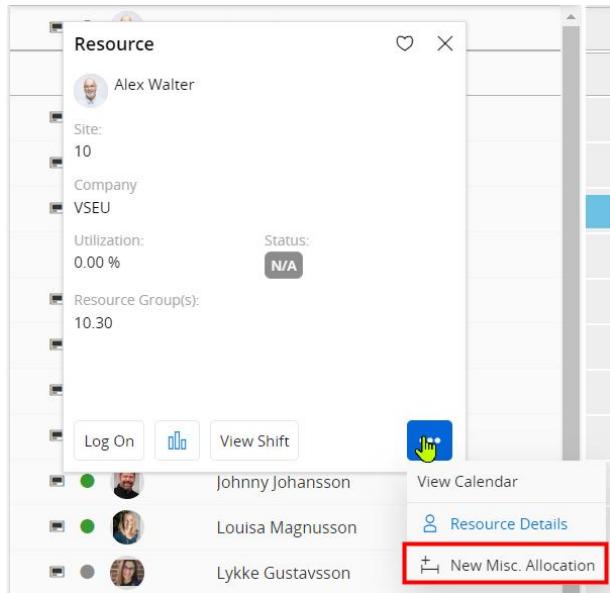
[Create](#) [Cancel](#)

MRAs with Pending Approval can be moved and deleted in PSO, changes will be synced to IFS Cloud.

MRAs are also displayed in DC.

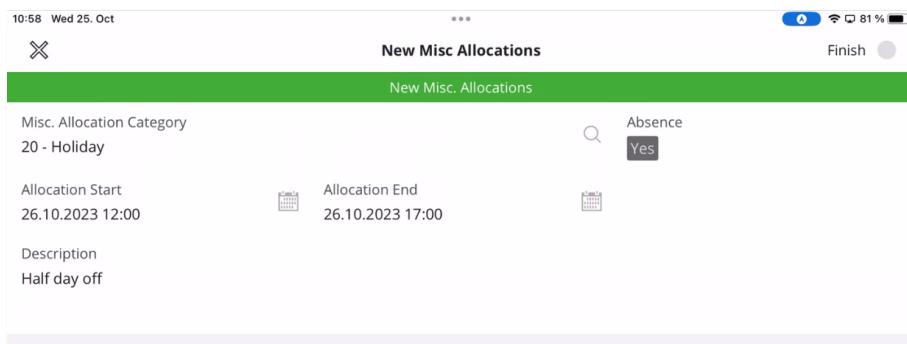
Resources																	
		Name	Wed, May 15, 2024														
			6:30 AM	7:00 AM	7:30 AM	8:00 AM	8:30 AM	9:00 AM	9:30 AM	10:00 AM	10:30 AM	11:00 AM	11:30 AM	12:00 PM	12:30 PM	1:00 PM	1:30 PM
		Alex Tonen															

New MRAs can be registered directly from resource popup.



A screenshot of the IFS Cloud interface showing the Resource details for Alex Walter. The interface includes fields for Site (10), Company (VSEU), Utilization (0.00 %), and Resource Group(s) (10.30). Below these are buttons for Log On, View Shift, and a blue 'New' button. A list of other resources (Johnny Johansson, Louisa Magnusson, Lykke Gustavsson) is shown, with the 'New Misc. Allocation' button for Lykke Gustavsson highlighted by a red box.

Finally, it's possible to manage MRAs in MWO under *My Misc Allocation*. Note that in MWO it is not possible to provide a location for the MRA.



A screenshot of the 'New Misc Allocations' mobile application. The screen shows fields for 'Allocation Start' (26.10.2023 12:00), 'Allocation End' (26.10.2023 17:00), 'Description' (Half day off), and 'Absence' (Yes). The 'Absence' field has a dropdown menu open, showing 'Yes' as the selected option.

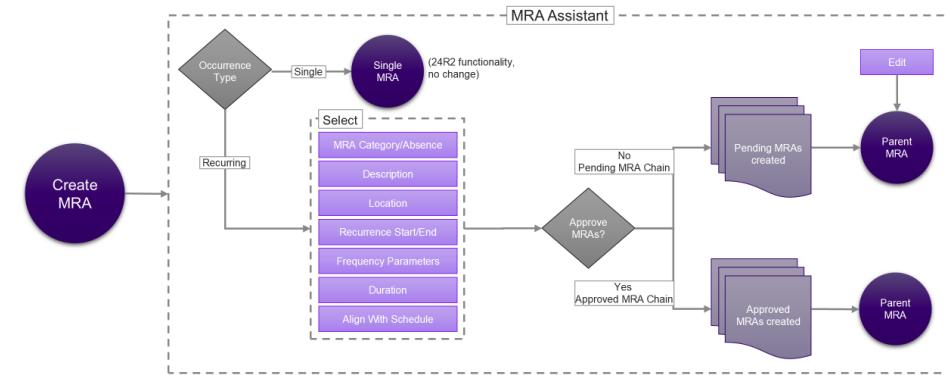
The application parameters **CALENDAR_FUTURE_LIMIT** and **CALENDAR_HISTORY_LIMIT** define the number of days that should be used to show future/historic events like absences, training allocations, project allocations, and miscellaneous resource allocations in the calendar. For details refer to [MWO Demystified](#).

Recurring MRA - Misc. Resource Allocations (25R1★)

Recurring MRAs can be established over a customizable timeframe and aligned with a resource's shift pattern. For example, a shift planner may need to schedule an MRA for a team meeting every Friday at 9:00, or a recurring 30-minute MRA for each technician at the beginning of their shift. This can be efficiently managed through a single recurring MRA parent record, eliminating the need to create individual MRAs for each instance.

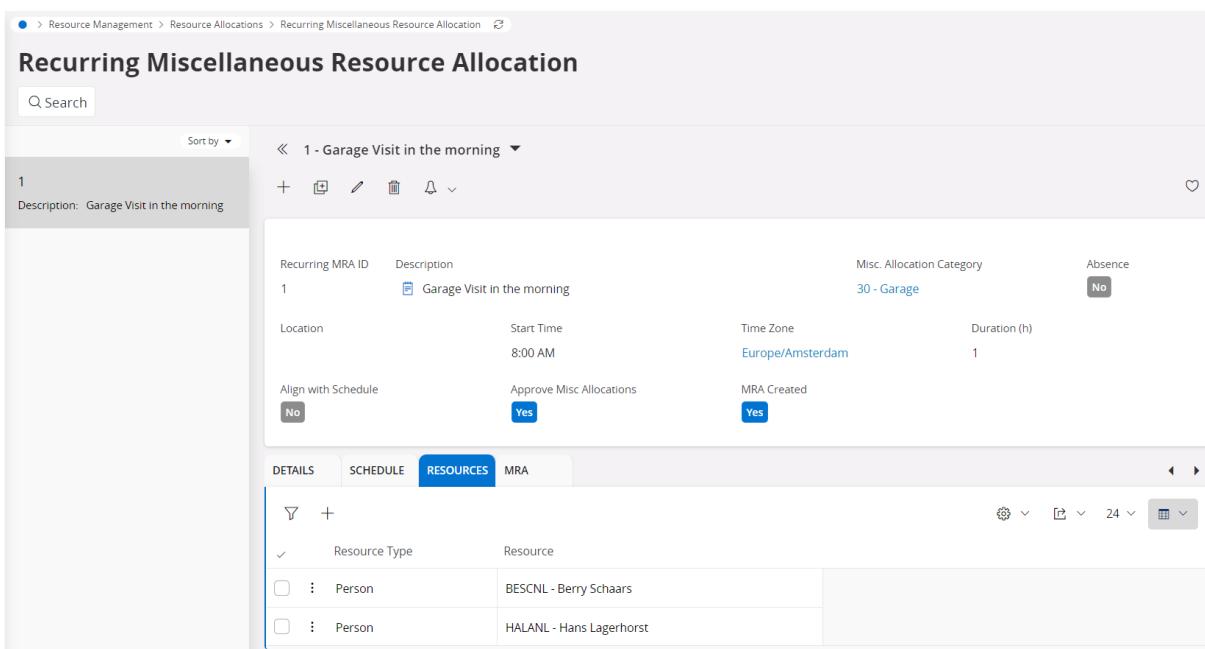
Recurring Miscellaneous Resource Allocations Concept

When creating an MRA, the user is able to define it as a recurring MRA or as a single instance. For recurring MRAs, subsequent edits are handled via the parent record, e.g., where the 9:00 meeting is moved to 9:30 on the parent record, all child MRAs (subject to status) will inherit the updated meeting time.



The administrative overhead of creating and maintaining multiple resource MRA records is reduced, as the shift planner is able to create recurring, cyclical MRA records for one or many resources simultaneously. The shift planner can incorporate regional holidays or local scheduling variations into their plan, significantly reducing the amount of manual work required in modifying shifts after they have been generated. This provides the planner with a more accurate view of the availability of their resources from a shift planning and capacity management perspective. Modifications to resource shifts, and the overall shift plan can be carried out more efficiently, saving the shift planner time.

One method is to create a Recurring MRA at **Resource Management>Resource Allocations>Recurring Miscellaneous Resource Allocation**, and then add the resources.



The screenshot shows the 'Recurring Miscellaneous Resource Allocation' screen. The top navigation bar includes 'Resource Management > Resource Allocations > Recurring Miscellaneous Resource Allocation'. The main area displays a list of MRAs with a single entry: '1 - Garage Visit in the morning'. Below the list, detailed information is shown for this specific MRA:

Recurring MRA ID	Description	Misc. Allocation Category	Absence
1	Garage Visit in the morning	30 - Garage	No

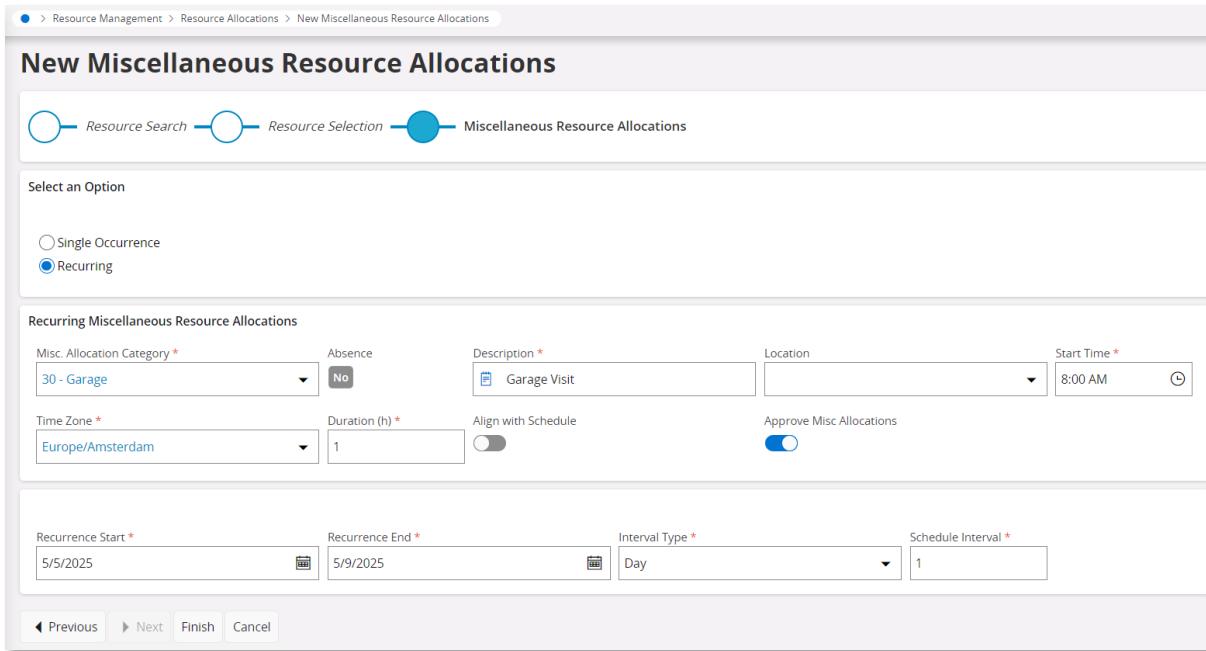
Below the details, there are several configuration options:

- Location:** Start Time: 8:00 AM, Time Zone: Europe/Amsterdam, Duration (h): 1
- Align with Schedule:** No
- Approve Misc Allocations:** Yes
- MRA Created:** Yes

The bottom section shows the 'RESOURCES' tab selected, displaying a table of assigned resources:

Resource Type	Resource
Person	BESCNL - Berry Schaars
Person	HALANL - Hans Lagerhorst

The second approach is to use the Assistant at **Resource Management>Resource Allocations>New Miscellaneous Resource Allocations**. This allows you to filter resources by various criteria and create the MRA:



The screenshot shows the 'New Miscellaneous Resource Allocations' form. At the top, there are three circular icons: 'Resource Search' (light blue), 'Resource Selection' (medium blue), and 'Miscellaneous Resource Allocations' (dark blue). Below these, a breadcrumb path shows 'Resource Management > Resource Allocations > New Miscellaneous Resource Allocations'. The main title is 'New Miscellaneous Resource Allocations'. A sub-section titled 'Select an Option' contains two radio buttons: 'Single Occurrence' (unselected) and 'Recurring' (selected). The 'Recurring' section includes fields for 'Misc. Allocation Category' (30 - Garage), 'Absence' (No), 'Description' (Garage Visit), 'Location' (empty dropdown), 'Start Time' (8:00 AM), 'Time Zone' (Europe/Amsterdam), 'Duration (h)' (1), 'Align with Schedule' (disabled), and 'Approve Misc Allocations' (disabled). Below this is another section for 'Recurrence Start' (5/5/2025), 'Recurrence End' (5/9/2025), 'Interval Type' (Day), and 'Schedule Interval' (1). At the bottom are buttons for 'Previous', 'Next', 'Finish', and 'Cancel'.

Recurrence Start/End and Interval define the period, during which MRAs will be generated. The individual MRA allocations can be reviewed on the *Schedule* tab, they will also be sent to PSO immediately.

Approve Misc. Allocations on the header will authorize all occurrences for all resources. Otherwise, manual approval is required for each resource and each occurrence.

Product Structure (25R1)

In IFS Cloud, a “Service Object” refers to what is commonly known as “equipment,” “installed base”, “(customer) asset,” or simply “object”. Service Objects can be classified as either Functional or Serial. The primary distinction between the two is that functional objects are typically stationary and rarely relocated, whereas serial objects are frequently moved throughout the facility, transferred between different object structures, or placed into inventory.

Serial objects may also include those classified as non-movable type. Non-movable serial objects, such as turbines or other large equipment that are not operational but are rarely relocated, can be registered as functional objects. For these types of items, which represent tangible components, it is possible to assign both a part number and a serial number, similar to movable serial objects. However, the position of such objects within the structure remains fixed.

A Model is a classification of objects, typically designated by the manufacturer. It usually serves as a unique identifier or code for a particular version or configuration of an object. Information that may be included in a Model includes category, size, color, features, and other relevant characteristics. Models are often used alongside other identifiers, such as serial numbers or part numbers, to provide more detailed and specific information. The Model functions as a template for Service Objects and can also be linked to a part.

A Service Bill of Materials (SBOM) is a compilation of all serviceable components within a Service Object. Unlike a traditional Bill of Materials (BOM), which is used in manufacturing and assembly, an SBOM identifies the parts, components, and materials needed for after-sales service or support. A Model functions as a template for generating a single Service Object, while the SBOM serves as a template for constructing a Service Object Hierarchy.

Note: The term “Product” is not used in Service Management.

Brand

 [Service Management>Basic Data>Installed Base Basic Data>Brands](#)

Brands allow a manufacturer to distinguish their goods or services from those of other sellers. If we take BMW as a manufacturer, their brands are "BMW" and "Mini". Brands can be associated to Models and will then be inherited to objects that are associated with the Model. Only "Active" brands are available in lists of values, brands can also be hidden.

Service Management > Installed Base > Basic Data > Brands

Brands

	Brand	Description	Validity
<input type="checkbox"/>	HITACHI	Hitachi HVAC Systems	Active
<input type="checkbox"/>	PANASONIC	Panasonic HVAC Systems	Active
<input type="checkbox"/>	SAMSUNG	Samsung HVAC Systems	Active
<input type="checkbox"/>	TRANE	Trane HVAC Systems	Active
<input type="checkbox"/>	LENNOX	Lennox HVAC Systems	Active
<input type="checkbox"/>	CARRIER	Carrier HVAC Systems	Active
<input checked="" type="checkbox"/>	DAIKIN	Daikin HVAC Systems	Active
<input type="checkbox"/>	VENTECHI	Ventechi HVAC	Active

Brands don't have other attributes or functionality.

Object Families

Service Management>Basic Data>Installed Base Basic Data>Object Family

Object Families can be used to group objects. Each object family can consist of multiple subfamilies (only one parent/child level)...

Service Management > Installed Base > Basic Data > Object Family

Object Family 10 - Inverters

Object Family	Description
10	Inverters
OBJECT SUBFAMILIES SKILLS	
<input type="checkbox"/> 10	Modulating Inverter
<input type="checkbox"/> 20	Split Types

...and holds a set of certificates, competencies, and skills (see [Skills](#)). These can be associated to the entire object family or an individual subfamily and will be inherited by associated models.

Service Management > Installed Base > Basic Data > Object Family

Object Family 10 - Inverters

Object Family	Description
10	Inverters

OBJECT SUBFAMILIES **SKILLS**

Skills

Skill Type	Skill	Skill Level	Person	Tool/Equipment	Crew	Share With Corequisite	Object Subfamily
30 - Safety and Complia...	1300 - Field Safety and ...		Yes	Yes	Yes	No	10
10 - HVAC Skills	1100 - Building Manage...	Expert	Yes	Yes	Yes	No	

Competencies

Competency Group ID	Competency Group Name	Competency ID	Competency Name	Competency Level	Object Subfamily
110	Service Management	1048	Mechanical Engineering	Average	
110	Service Management	1046	Electrical Engineering	Good	

Certificates

Certificate Group ID	Certificate Group Name	Certificate ID	Certificate Name	Certificate Level	Object Subfamily
(No data)					

Models (25R1)

Service Management>Installed Base>Model

A model is a categorization of objects, usually assigned by the manufacturer. A model is normally a unique identifier or code that is used to identify a specific model or version of a product/object. Models are often used by manufacturers and service providers to distinguish between different models of an object or product, and to track and manage inventory and sales. A model might include information such as the category, size, color, features, and other characteristics. Models are often used in conjunction with other identifiers, such as serial numbers or part numbers, to provide more detailed and specific information.

When creating a Service Object in IFS Cloud, the model can act as a template. A model can also be associated with a part, where the part will display connected objects and service history.

The second big benefit of models is that they allow a higher abstraction level when creating requests, recurring service programs, contracts, etc. Instead of specifying the individual Service Object, it is possible to use the model to define a broader service scope that covers multiple Service Objects.

Model serialization specifies if the objects of the model will be serially tracked or not. The **Serialized** attribute of the model decides about the type of Service Objects that can be connected/created from the model.

Models can be associated with SBOMs. Only active revisions are available for selection. Note that SBOMs containing Non-serial Models as components cannot be connected to any Serial Models.

Service Management > Installed Base > Model >

Model

Search (1)

Sort by: VTZSR-100 Description: Ventechi-Z Series

Model ID: VTZSR-100 Description: Ventechi-Z Series Object Family: 10 - Inverters

Object Subfamily: VENTECHI - Ventechi HVAC Brand: VENTECHI - Ventechi HVAC Serialized: Yes

General: Introduced Date: 6/1/2022 Created Date: 4/23/25, 10:50 PM Object Type: 30.02 - Single room Vente...

SBOM ID: VTZ-1001 SBOM Revision: 1 Create Object Structure from SB...

Notes:

SPARES

Part No	No Part Description	UoM	Quantity
F25383 - Fan Motor HP...		PCS	1
P4009845 - Front panel		PCS	1

Image

Ventechi_Z_Series_Units_Bg



When **Create Object Structure from SBOM** is enabled, the object structure will be automatically generated according to the SBOM when manually creating Service Objects and delivering through Customer Orders.

Models inherit certificates, competencies, and skills (see [Skills](#)) from the object family/subfamily. Inherited lines can be excluded for the individual model using the **Exclude** button, further lines can be added.

Service Management > Installed Base > Model >

Model

Sort by: VTZSR Description: Ventechi-Z Series

Model ID: VTZSR Description: Ventechi-Z Series Object Family: 10 - Inverters

Object Subfamily: VENTECHI - Ventechi HVAC Serialized: Yes

Image

Model VTZSR



SKILLS

Skills

Exclude

Show Applicable Apply Clear Settings

Skill Type	Skill	Skill Level	Person	Tool/Equipment	Crew	Share With Corequisite	Inherited	Excluded
30 - Safety and Complia...	1300 - Field Safety and ...	Yes	Yes	Yes	No	Yes	No	

Competencies

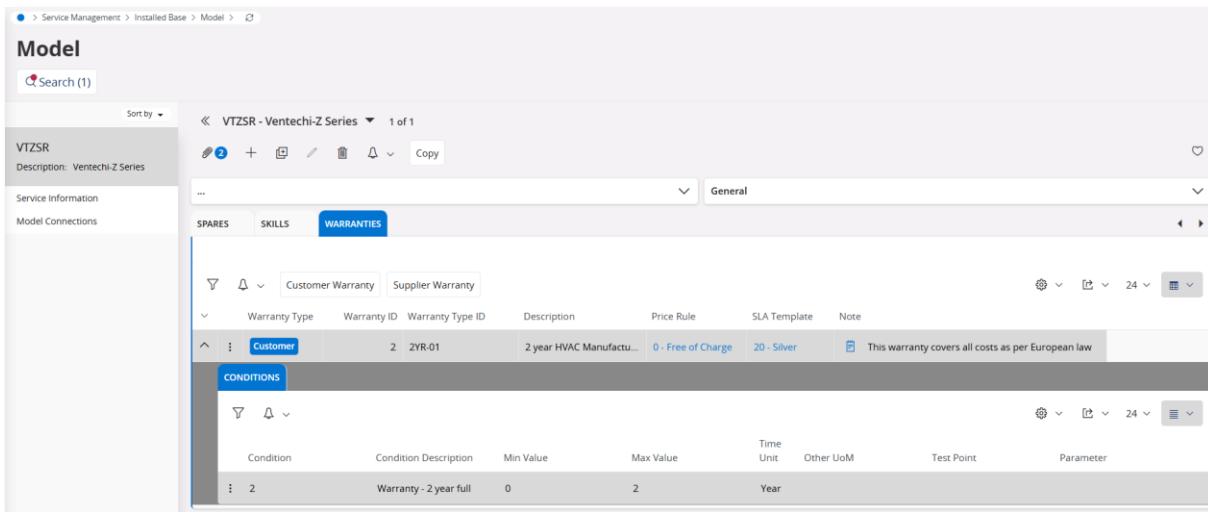
Competency Group ID: 110 Competency Group Name: Service Management Competency ID: 1048 Competency Name: Mechanical Engineering Competency Level: Average Inherited: Yes Excluded: No

Competency Group ID: 110 Competency Group Name: Service Management Competency ID: 1046 Competency Name: Electrical Engineering Competency Level: Good Inherited: Yes Excluded: No

Certificates

Certificate Group ID Certificate Group Name Certificate ID Certificate Name Certificate Level Inherited Excluded

Warranties (see [Warranties](#) (25R1P)) on a model act as templates for associated Service Objects. They can be defined using an existing template or from scratch for the specific model. Standard warranties can also be defined for parts, see [Part Warranties](#) (25R1P).



Note: When using templates, it is not possible to modify model warranties, and any changes made to the template will automatically be reflected on the model.

Note: Warranties defined on a model are only templates. They are not considered valid warranty records on Requests that are only associated to a model, not a Service Object.

Models can also specify **Testpoints** and **Parameters**, which will be inherited when a new Service Object specifies that model. Testpoints are mainly used for carrying out measurements. These testpoints do not necessarily have to be visible parts of an object, e.g., bearings for a pump, or a weld on a tank. Parameter represents an object's condition such as temperature, quantity produced or operation hours, oil level, pressure, etc. The parameter can measure one of two types of values; Accumulated or Limit values. An **Accumulated parameter** can for example measure operation time or produced quantity. A **Limit parameter** can be used to measure temperature, oil level, pressure, water flow, etc. Measurements can be created from IoT signals (in IFS Cloud represented as "Observations") or by a technician using IFS Mobile (MWO).

Service Management > Installed Base > Model > Service Information

Service Information

VTZSR - Ventechi-Z Series 1 of 1

Model ID	Description
VTZSR	Ventechi-Z Series
Object Family	Object Subfamily
10 - Inverters	
Brand	Serialized
VENTECHI - Ventechi HVAC	<input checked="" type="checkbox"/>

Image
Model VTZSR

TESTPOINTS/PARAMETERS RECURRING PACKAGES SERVICE RECORD

Test Points

Test Point ID	Test Point Description	Placement
10	Operating hours	
20	Low side pressure	
30	High side pressure	

Parameters

Parameter ID	Parameter Description	UoM	Blocked for Use
40	Operating hour	h	No

The **Spares** list allows the specification of manufacturer-recommended spare material/parts that will be needed for services carried out on the Service Object. Spares can be Parts (registered in the system) or No-parts. As of 24R2 these recommended parts are just listed here, they are not used by any process.

Service Management > Installed Base > Model > Material Information

Material Information

VTZSR - Ventechi-Z Series 1 of 1

Model ID	Description
VTZSR	Ventechi-Z Series
Object Family	Object Subfamily
10 - Inverters	
Brand	Serialized
VENTECHI - Ventechi HVAC	<input checked="" type="checkbox"/>

Image
Model VTZSR

SPARES PARTS USED

Part No	No Part Description	UoM	Quantity
P4009845 - Front panel		PCS	1
P4009847 - Side panel L...		PCS	1
P3509845 - Electrical w...		PCS	1
P2509845 - Mounting pl...		PCS	1
P9009845 - Heat excha...		PCS	1
P12509845 - Wireless U...		PCS	1
Condensor		PCS	1

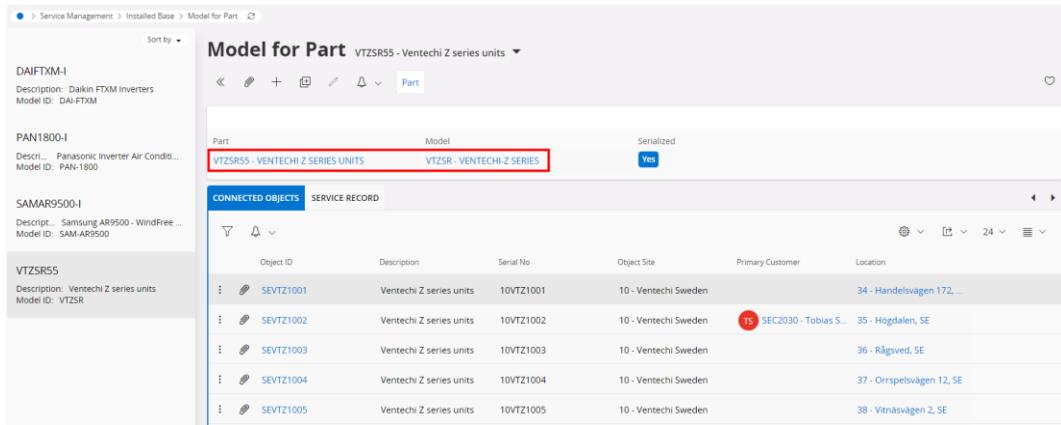
Model/Part Connection

Different variants of a model can be associated with individual parts. A service object can be linked to both a part and a model, which will allow users to view Service History and Connected Objects from the part point of view. Parts that have 'Serial Tracking' are only allowed to connect to Serialized Models and vice versa.

Note: The established part-model connection cannot be changed or removed when there are Service Objects attached to the part.

Service Management>Basic Data>Installed Base Basic Data>Model for Part

The page links a part to a model (n:1) and shows the Service Objects that use this model/part combination. Multiple parts can be associated to the same model.



The screenshot shows the 'Model for Part' screen for the VTZSR55 - Ventechi Z series units. On the left, a sidebar lists various parts: DAIFTXM-I, PAN1800-I, SAMAR9500-I, and VTZSR55. The main area displays the selected part and model information: VTZSR55 - VENTECHI Z SERIES UNITS and VTZSR - VENTECHI-Z SERIES. A 'Serialized' checkbox is checked. Below this, the 'CONNECTED OBJECTS' section lists five service objects: SEVTZ1001 through SEVTZ1005, each associated with a specific object ID, description, serial number, object site, primary customer, and location. The 'Primary Customer' column for SEVTZ1002 shows a red circular badge with 'T5 SEC2030 - Tobias S...'.

During the creation of a new Service Object:

- When the model is selected, only associated parts can be chosen.
- When the part is selected, the associated model will be set automatically.

Inheritance of Service Attributes

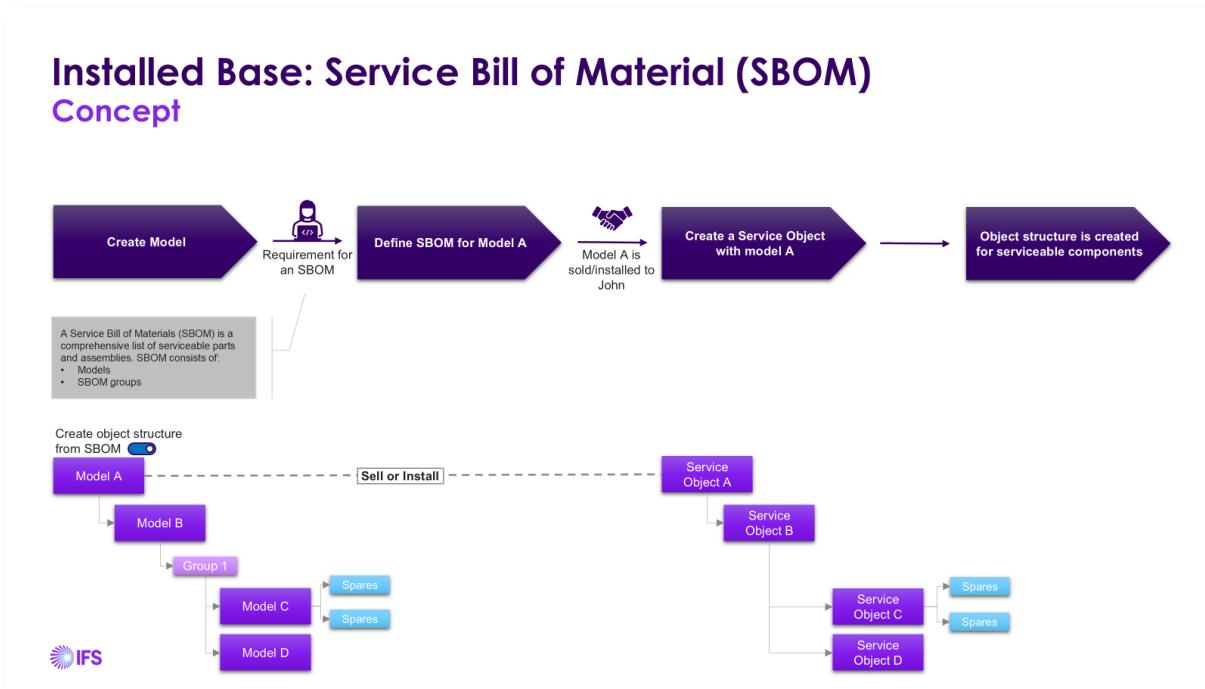
A hierarchy is maintained through Object Family/Object Subfamily, Model, Part and the Service Object in order to inherit, reflect and recommend service-related information for the service objects and the services performed on them. An inherited item that is displayed on any level of the hierarchy can be marked as 'Excluded'. When an item is inherited, but excluded, the exclusion can be revoked using the 'Include' action.

Service Attributes	From Object Family/Subfamily to Model	From Model to Part	From Model to Object	From Part to Object
Skills (Certificates/Competencies)	Inherited	Inherited	Inherited	Inherited
Recurring packages	n/a	Inherited	n/a	n/a
Spares	n/a	Inherited	Inherited	Inherited
Test points/Parameters	n/a	Inherited	Instantiated	Instantiated

Service Bill of Material (25R1★)

Concept

The Service Bill of Material (SBOM) was introduced to support a service-oriented structure that can be referenced across the service lifecycle.



It provides a hierarchical representation of serviceable objects, offering a clear and organized view of related service data. SBOMs automate the generation of Service Object structures when Models are sold or installed, reducing manual effort and ensuring consistency. This ensures that service teams have accurate, structured, and readily accessible data, enabling seamless support throughout the service lifecycle.

SBOM Groups (25R1★)

📁 Service Management>Basic Data>Installed Base Basic Data>SBOM Groups

SBOM Groups can be used to represent virtual groupings in an SBOM.

Service Management > Basic Data > Installed Base Basic Data > SBOM Groups

SBOM Groups

Search

Group ID	Group Name
HVAC-1001	Indoor unit (Evaporator)
HVAC-1002	Outdoor unit (Condenser)
HVAC-1003	Refrigerant and Accessories
HVAC-1005	Installation Materials

Define a Service Bill of Material (25R1★)

Service Management>Installed Base>Service Bill of Material

Use **New** to create a structure and **New Revision** to revise an existing one. Previous SBOM components are copied into the new revision. **Copy** creates a new SBOM with a different ID and duplicates the components.

Service Management > Installed Base > Service Bill of Material

Service Bill of Material

VTZ-1001
SBOM Revision: 2
Active

Service Bill of Material

- SBOM ID: VTZ 1001
- SBOM Revision: 2
- Description: Service Bill of Materials for Ventechi Z series

Image: Ventechi_Z_Series_Units_Bg

Components

Node Type	Node ID	Part No for Object	Object Generation Prefix	Is Serialized	Include Structure	Quantity
Group	HVAC-1001 - Indoor unit (Evaporator)					
Group	HVAC-1002 - Outdoor unit (Condenser)					

The SBOM structure consists of nodes that can be Models or Groups:

- **Model** is a child component of the product
- **Group** is a virtual grouping to cluster Models in the structure.

Models can have an SBOM associated directly or can be added to an SBOM as Node Type=Model by setting the **Include Structure** toggle. **Part No for Object** is mandatory when connecting a Serial Model.

Service Bill of Material

VTZ-1001
SBOM Revision: 2
Active

Group
Node Type: Group
Group: HVAC-1001 - Indoor unit (Evaporator)

COMPONENTS

Model	Node ID	Part No for Object	Object Generation Prefix	Is Serialized	Include Structure	Quantity
VTZSR-I - Ventechi Z Ser...	VTZSR55-I	VTZSR-I	Yes			1

VTZ-1001 - Service Bill of Materials for Ventechi Z series
Group - HVAC-1001 - Indoor unit (Evaporator)
VTZSR-I - 1
P4009845- Front panel
P4009846- Front grill
Fan Coil Unit-
Condensor-

When the SBOM includes a model, the Spares tab shows the model's associated spare parts. The list can include regular parts and no-parts (a.k.a. write-in parts).

Service Bill of Material

VTZ-1001
SBOM Revision: 2
Active

Model
Model: VTZSR-O - Ventechi Z Series Outdoor Unit
Object Family: 10 - Inverters
Object Subfamily:
Brand: VENTECHI - Ventechi HVAC
Serialized: Yes

COMPONENTS SPARES

Part No	No Part Description	UoM	Quantity
P4009847 - Side panel left		PCS	1
P4009848 - Side panel right		PCS	1
	Fan Coil Unit	PCS	1
	Condensor	PCS	1

VTZ-1001 - Service Bill of Materials for Ventechi Z series
Group - HVAC-1001 - Indoor unit (Evaporator)
VTZSR-I - 1
P4009845- Front panel
P4009846- Front grill
Fan Coil Unit-
Condensor-
Group - HVAC-1002 - Outdoor unit (Condenser)
VTZSR-O - 1
P4009847- Side panel left
P4009848- Side panel right
Fan Coil Unit-
Condensor-

Once a SBOM was created, it can be connected to multiple models.

Note: SBOMs containing Non-serial Models as components cannot be connected to any Serial Models.

Service Management > Installed Base > Model >

Model

Search (1)

Sort by ▾ << VTZSR-S-BOM - Ventechi-Z Series ▾ 1 of 1

+ Copy

Service Information	Model ID: VTZSR-S-BOM	Description: Ventechi-Z Series	Object Family: 10 - Inverters	General
Model Connections	Object Subfamily: Ventechi-Z Series	Brand: VENTECHI - Ventechi HVAC	Introduced Date: 7/16/25, 4:28 PM	Created Date: 7/16/25, 4:28 PM
		Serialized: No	SBOM ID: VTZ-1001	Object Type:
			SBOM Revision: 2	Create Object Structure from S...
			Object Generation Prefix: VTZSR-S-BOM	Notes:

SPARES SKILLS WARRANTIES

Part No	No Part Description	UoM	Quantity
VENT-001	- Ventilation...	pcs	24

Image: Ventechi_Z_Series_Units_Bg

Create Service Objects based on SBOM (25R1★)

When **Create Object Structure from SBOM** is enabled on the model, the full SBOM hierarchy is automatically generated during manual Service Object creation or Customer Order delivery. In this case, the **Object Generation Prefix** is used to create child objects.

The SBOM structure is mapped to the Object Structure:

- Serial Models → Serial Objects
- Non-Serial models → Functional Objects
- Groups → will not be included in Object Structure

A Service Object based on the above model looks like this:

Service Management > Installed Base > Service Object 360

Service Object 360

NLVITZ8800
Service Object Site: 2501
Service Object Description: Ventechi-Z Series
Operational Status:

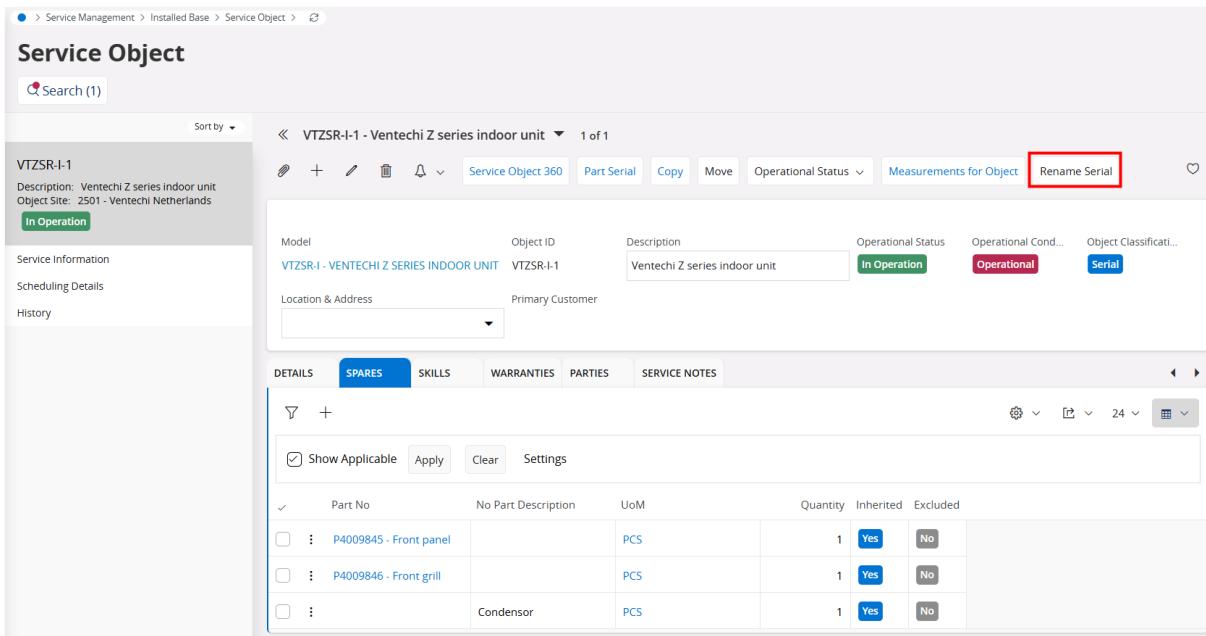
Function: NLVITZ8800 - Ventechi-Z Series
VITZSR-I-1 - Ventechi Z series indoor unit
VITZSR-O-1 - Ventechi Z series outdoor unit

Object ID: VITZSR-I-1 - Ventechi Z series indoor unit	Model: VTZSR-I - Ventechi Z Series Indoor Unit	Operational Status:	Operational Condition:																															
Object Classification: Serial	Location & Address: Primary Customer																																	
SUMMARY CHILD OBJECTS SERVICE OBJECT FINANCIALS CONTRACT LINES RECURRING SERVICES REQUESTS/WORK TASKS MORE INFORMATION SERVICE NOTES																																		
Spares	Warranties	Testpoints/ Parameters	History	Parties																														
Spares <table border="1"> <thead> <tr> <th>Part No</th> <th>No Part Description</th> <th>UoM</th> <th>Quantity</th> <th>Inherited</th> <th>Excluded</th> </tr> </thead> <tbody> <tr> <td>P4009845</td> <td>- Front panel</td> <td>PCS</td> <td>1</td> <td></td> <td></td> </tr> <tr> <td>P4009846</td> <td>- Front grill</td> <td>PCS</td> <td>1</td> <td></td> <td></td> </tr> <tr> <td></td> <td>Fan Coil Unit</td> <td>PCS</td> <td>1</td> <td></td> <td></td> </tr> <tr> <td></td> <td>Condenser</td> <td>PCS</td> <td>1</td> <td></td> <td></td> </tr> </tbody> </table>					Part No	No Part Description	UoM	Quantity	Inherited	Excluded	P4009845	- Front panel	PCS	1			P4009846	- Front grill	PCS	1				Fan Coil Unit	PCS	1				Condenser	PCS	1		
Part No	No Part Description	UoM	Quantity	Inherited	Excluded																													
P4009845	- Front panel	PCS	1																															
P4009846	- Front grill	PCS	1																															
	Fan Coil Unit	PCS	1																															
	Condenser	PCS	1																															

Components have been created and named automatically, all spare parts were inherited, and it's possible to exclude inherited spare parts if they are not relevant for a specific object.

When a Customer Order is delivered, if the Model connected to the Sales Part has a SBOM and **Create Object Structure from SBOM** is enabled, a Service Object structure will be created.

In both cases, serial numbers underneath Service Objects will be automatically generated and can be changed later using **Rename Serial**.



The screenshot shows the IFS Service Management interface for a Service Object. The object ID is VTZSR-I-1, and the description is 'Ventechi Z series indoor unit'. The status is 'In Operation'. The 'Rename Serial' button is highlighted with a red box. The 'SPARES' tab is selected, showing a table of spares with columns: Part No, No Part Description, UoM, Quantity, Inherited, and Excluded. Three items are listed: P4009845 - Front panel (UoM PCS, Quantity 1, Inherited Yes, Excluded No), P4009846 - Front grill (UoM PCS, Quantity 1, Inherited Yes, Excluded No), and Condensor (UoM PCS, Quantity 1, Inherited Yes, Excluded No).

Part No	No Part Description	UoM	Quantity	Inherited	Excluded
P4009845 - Front panel		PCS	1	Yes	No
P4009846 - Front grill		PCS	1	Yes	No
	Condensor	PCS	1	Yes	No

Renaming is only possible if:

- the serial part is not connected to a tool/equipment
- the current position of the serial part is **In Facility** or **Contained**
- the serial part does not have any inventory transactions registered in the Part Serial History

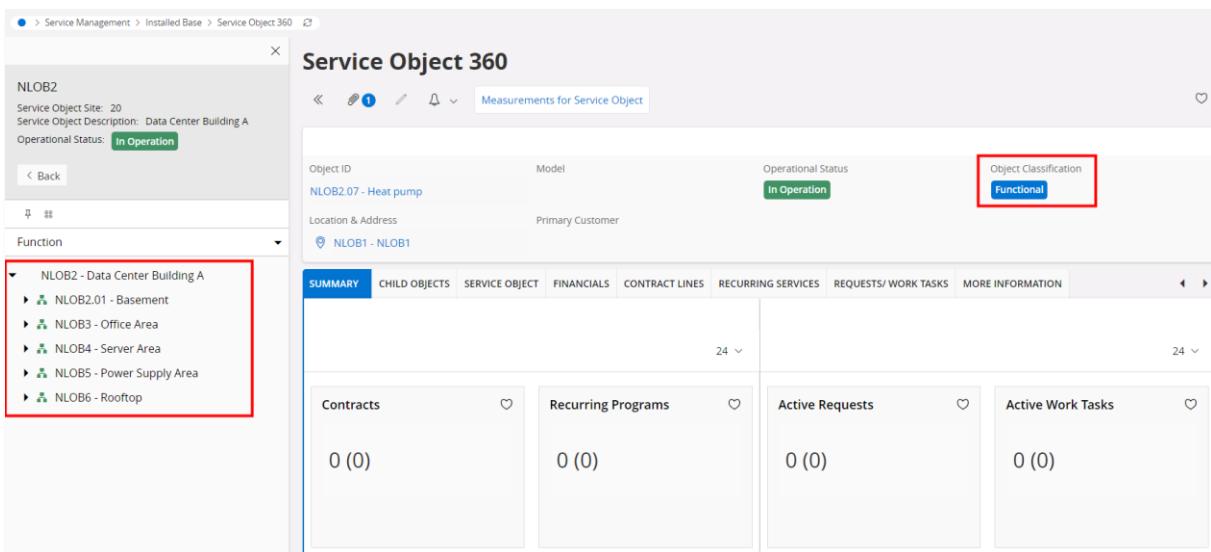
Service Object

Functional and Serial Objects

The Service Object represents the object/equipment/asset being serviced. It can either be a functional (non-serial) object or a serial object. In IFS Cloud these are implemented as **Equipment Objects**, which are shared with EAM and Work Order management.

Functional Objects are generally static objects i.e., they represent a geographical location or equipment that doesn't move and thus does not require tracking in detail or when in inventory. A functional object can have a reference to a part and a serial number, but the part isn't tracked. An example of a functional object structure could be a customer site where the building is the root object, and the rest of the building is represented by additional child objects.

Note: In contrast to Functional Objects, a functional Service Object does not require object levels. When viewing a Service Object on the “old” Functional Object page, object level will show up as “undefined”.



Serial Objects are objects that frequently move (in and out of locations, between locations) and that we need to keep track of. As a general rule, a serial object is anything that you need to track and that has a serial number. A moveable object can be a HVAC unit that is situated in a specific room in a structure.

Serv... < > Search Advanced

Object Site Description Object Type Serial No Part Model Primary Customer Object ID: NLVTZ2037 More Favorites Search Clear

Service Object NLVTZ2037 - Ventechi Z series units 1 of 1

Service Information Material Information Scheduling Details History

Model VTZSR - VENTECHI Z SERIES Object ID NLVTZ2037 Description Ventechi Z series units Operational Status In Operation Operational Condition Operational Object Classification Serial

Location & Address 84 - Rijn Sloterstraat 2, NL Primary Customer NL20101 - Amazing Web Services Zandvoort

DETAILS SKILLS WARRANTIES PARTIES

Details

Object Site	Object Type	Description
20 - Ventechi Netherlands	30 - Single-room ventilation systems	Ventechi Z series units
Installation Date	Category	Operational Status
11/8/2021	01 - Mechanical	In Operation

Relationships

Belongs to Object	Belongs to Site	Brand	Object Family
		VENTECHI	10

Part Information

Part	Serial No	Supplier	Manufacturer
VTZSR05 - VENTECHI Z SERIES UNITS	NLVTZ2037		
Part Ownership	Part Owner	Current Position	Manufactured Date
Customer Owned	NL123537 - FAM. DE JONG	In Facility	

Notes

Note: Even when a serial Service Object is linked to a model, it still needs to be associated to a part.

When specifying the **Location** of a Service Object that does not have customer parties specified, the list only shows locations with **Location Category = Location**.

Model Object ID Description * Operational Status Object Classification

LX-10000 New Functional Object In Operation Functional

Location & Address Primary Customer

MUC-10001 (Location ID)
Munich Location (Name)

PARTIES SERVICE NOTES

Primary Party Type Party Identity

(No data)

As soon as customer parties are associated...

DETAILS SKILLS WARRANTIES PARTIES SERVICE NOTES

Primary Party Type Party Identity

<input type="checkbox"/> No	Customer	AW NL20101 - Amazing Web Services Zandvoort
<input type="checkbox"/> No	Customer	VB NL20103 - Van Buren Hotel Amsterdam-Amstel

...the list will also include their locations:

Service Object vs. Equipment Object

The **Service Object Page** is a join of Functional and Serial Objects, showing the attributes that are important for a service business.

From a Service perspective there are additional needs around objects that are not covered in the legacy equipment handling, however they do not conflict with the EAM needs. The two different flavors are implemented using different client pages, all basic functionality is the same. Additional attributes and details include:

- **Model**
- **Spare Parts** (and Parts Used): New spare part handling has been introduced to replace the equipment spare part and detached spare part handling. The legacy spare parts handling was built to handle spare parts on one site whereas the new spare parts handling is designed to handle spares independent of sites and types of parts.
- **Skills**: Competencies, certificates, and skills needed to service the equipment. They are inherited from the associated model and can be excluded on the individual object.

Competency Group ID	Competency Group Name	Competency ID	Competency Name	Competency Level	Inherited	Excluded
SERVICE	Management	SME	Mechanical Engineering	Average	Yes	Yes
SERVICE	SEE		Electrical Engineering	Good	Yes	No

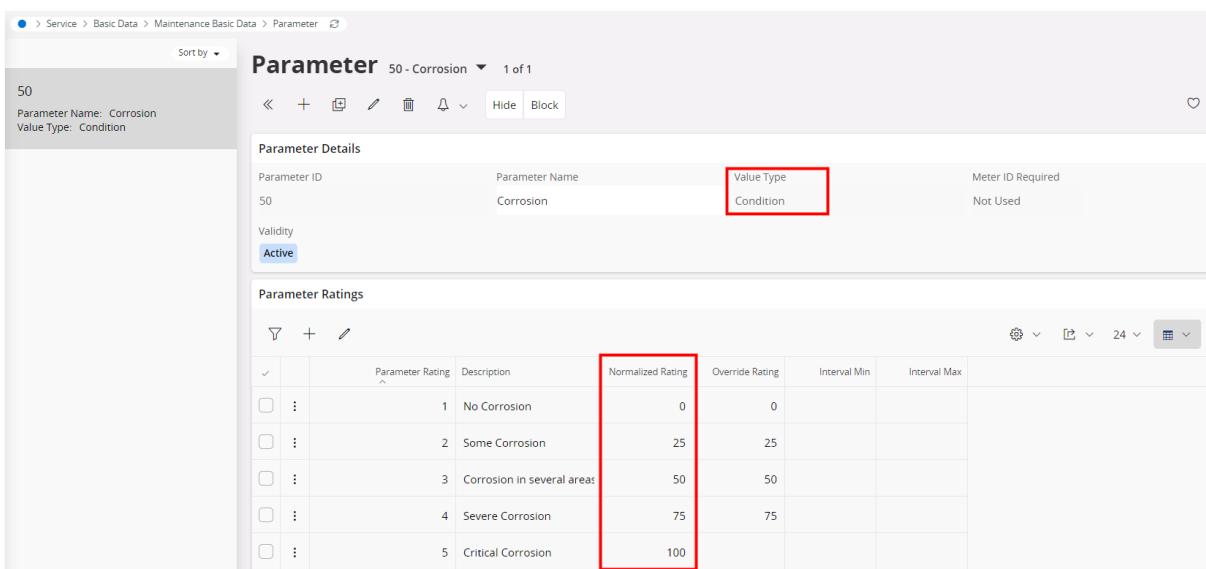
- **Test points and parameters**: These are inherited from the associated model and can be deleted/extended on the individual object.
- **Recurring Services**: Lists the Recurring Service Programs that apply to this equipment.

- **Warranties:** For details, please see [Warranties](#) (25R1P).
- **Scheduling Details:** Allows the definition of Service Calendars either in general or for specific work types and priorities. The calendar defines when work can be carried out. An example is preventative work with normal priority that can only be done on specific days outside of peak hours. Service Objects allow calendar-based availabilities as well as [Availability Patterns](#) (mutually exclusive per Service Object).
- **Preferences:** Allows the definition of preferred resources either in general or for specific activity types and priorities. Preferences can range from 1 (only consider this resource) to 0 (resource excluded). An example is urgent repairs that should ideally be done by resource ABC (preference=0.9)

Asset Condition Recording

Asset Condition Recording is a part of the Asset Performance Management (APM) solution to provide better insight into the status of assets. It enables reporting of the current condition of an asset and calculates a value based on several parameters to give an overall status of an asset. This capability is also available in MWO to report the condition of an asset as part of measurement reporting.

 [Service Management>Basic Data>Service Work Basic Data>Task Basic Data>Parameter](#)



The screenshot shows the 'Parameter' screen for '50 - Corrosion'. The 'Parameter Details' section includes the Parameter ID (50), Parameter Name (Corrosion), Value Type (Condition, highlighted with a red box), and Validity (Active). The 'Parameter Ratings' section displays a table of five rows, each representing a rating level from 1 to 5. The columns are Parameter Rating, Description, Normalized Rating, Override Rating, Interval Min, and Interval Max. The 'Normalized Rating' column is highlighted with a red box. The data is as follows:

Parameter Rating	Description	Normalized Rating	Override Rating	Interval Min	Interval Max
1	No Corrosion	0	0		
2	Some Corrosion	25	25		
3	Corrosion in several areas	50	50		
4	Severe Corrosion	75	75		
5	Critical Corrosion	100			

Parameter Rating and **Description** are shown to the MWO user, **Normalized Rating** is used to calculate the Condition Score.

Note: Normalized Rating ranges from 0 (best value) to 100 (worst value).

The Overall Condition Score of an equipment is calculated based on its weighted condition parameters, allowing to specify the significance of one parameter compared to the others. While this weighting can be defined on the individual equipment, a **Parameter Template** makes it easy to push out and make sure that similar assets have the same setup. These templates are maintained at [Service Management>Basic Data>Service Work Basic Data>Task Basic Data>Parameter Template](#)

Sort by > Service > Basic Data > Maintenance Basic Data > Parameter Template

Parameter Template

Single room ventilation systems 1 of 1

Template ID: 30

Template Description: Single room ventilation systems

TESTPOINTS/PARAMETERS

Test Points - Condition Parameter Weight: 100

Test Point ID	Test Point Description	Location
COND	Condition	

Parameters

Parameter ID	Parameter Description	Value Type	Condition	UoM	Meter ID Required	Criterion	Min Reading Limit	Max Reading Limit	Max Condition Rating
60	General Condition	Condition	60	*	Not Us	Yes			
50	Corrosion	Condition	40	*	Not Us	Yes			

When using **Push to Objects**, **Template ID** is used to match the equipment's **Object Type**.

Service Object NLVTZ2097 - Ventechi Z series units 2 of 2

Model: VTZSR - VENTECHI Z SERIES

Object ID: NLVTZ2097

Description: Ventechi Z series units

Operational Status: In Operation

Operational Condition: Operational

Object Classification: Serial

Location & Address: 683 - Joan Muykenweg 20, NL

Primary Customer: NL20103 - Van Buren Hotel Amsterdam-Amstel

DETAILS **SKILLS** **WARRANTIES** **PARTIES** **SERVICE NOTES**

Object Site: 20 - Ventechi Netherlands

Object Type: 30 - Single-room ventilation systems

Category: 01 - Mechanical

Service Object Image: Model VTZSR



For all matching objects, parameters can be added or updated.

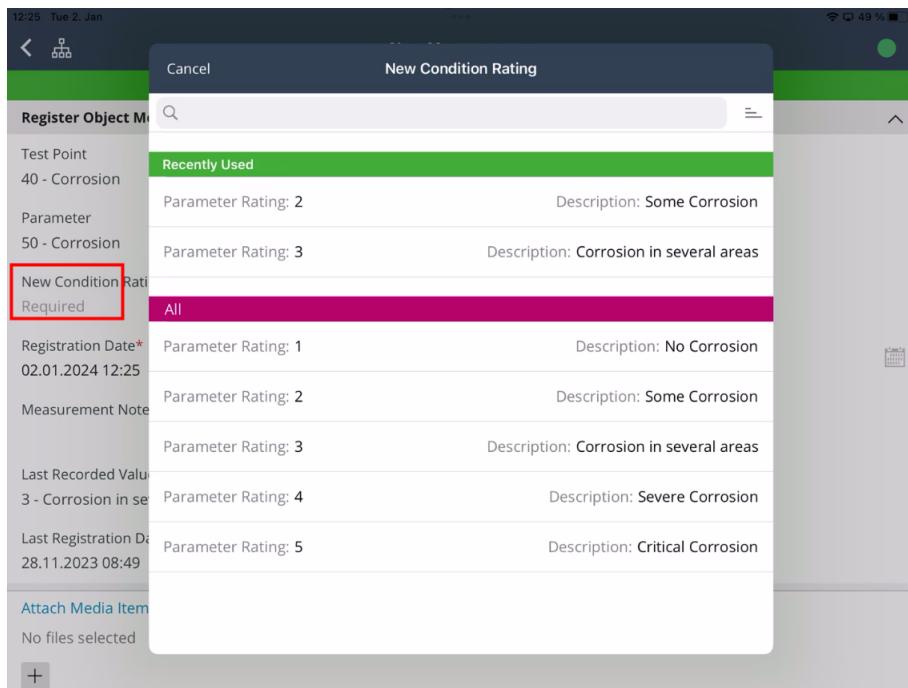
X Push To Objects

Type:

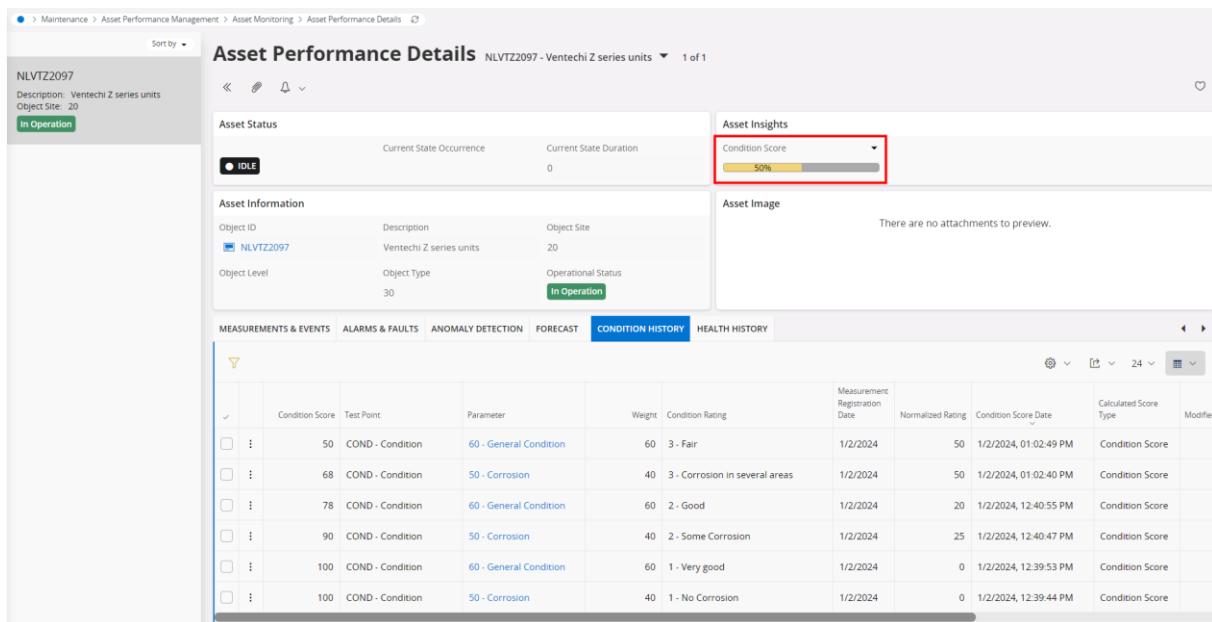
- Add parameters to objects that do not have any
- Add parameters that do not exist on object
- Add parameters that do not exist on object and update weights
- Replace all object parameters

OK Cancel

Whenever a new measurement is reported...



...the equipment's Condition Score is re-calculated. The **Condition Score** and **Condition History** is available at  Maintenance>Asset Performance Management>Asset Monitoring>Asset Performance Details.



Create Service Object from a Customer Order (25R1↗)

Service Objects (of type Serial) can be created manually, through the API, or from a Customer Order. This is achieved using the **Create SM Object** flag, which can be defaulted on the sales part...

Sales Part

Search (1)

Sort by < VTZSR55 - Ventechi Z series units - 2501 1 of 1

Inventory Part Availability Planning Complementary Parts Substitute Sales Part Inventory Part Document Text Customer Warranty

Sales Part No VTZSR55	Part Description In Use * Ventechi Z series units	Site 2501	Sales Type * Sales Only	Active
GENERAL DESCRIPTIONS CHARACTERISTICS CHARGES CONDITION CODE PRICING MAINTENANCE PART SPECIFIC OVERHEADS				
Inventory Part Sourcing Unit Of Measure Grouping Pricing Tax GTIN Miscellaneous Indicators Replacement Part Primary Sales Part Quickly Registered Part Export to External Application Create SM Object Document Text No Customer Warranty Yes				

...or set on the individual customer order line.

Sales > Order > Customer Order

Customer Order *1007

Status Share Operations Freight Invoice Related Pages Copy Order Order History Sales Promotions Commissions Project Access Document Text

Order No *1007	Customer NL20101 - Amazing Web Services Zandvoort	Site 20	Order Type NO	Wanted Delivery Date/Time 9/27/23, 12:00 AM	
Order Amounts					
Total Net Amount/Base 0.00 EUR	Total Contribution Margin/B... 0.00 EUR	Contribution Margin(%) 0.00	Total Net Amount/Curr 0.00 EUR	Total Tax Amount/Curr 0.00 EUR	Total Gross Amount/Curr 0.00 EUR
LINES RENTAL LINES ORDER DETAILS CHARGES INVOLVED PARTIES					
+ Save Cancel New					
Line No 10	Del No 0	Sales Part No VTZSR55-O	Sales Part Description Ventechi Z series ...	Sales Qty 1	Sales UoM PCS
Create SM Object <input checked="" type="checkbox"/> SM Connection <input type="checkbox"/> Superior SM Object ID NLOB1 <input type="checkbox"/> Superior SM Site 20 <input type="checkbox"/> Confirmed <input type="checkbox"/> Price/Curr 775.00 <input type="checkbox"/> Price					

At creation the service object will get its location from the customer's delivery address. If no such location exists, a new location will be created using the customer's delivery address. To be able to use this functionality, the sales part must be serialized. **Superior SM Object ID** allows the newly created Service Object to be placed under an existing Service Object in the structure.

Warranties (25R1↗)

Note: Warranty Management has been refactored to use and extend warranties from the Supply Chain Management module.

Warranties are frequently utilized in industries with high product volumes, where they must be simple to manage and apply. Warranty tracking is essential for customer service, facilitating the efficient handling of claims and repairs.

The Warranty functionality now integrates with procurement and sales capabilities, supporting both customer and supplier warranties within Request Management. By linking Warranty Templates to Parts, coverage is automatically applied to Service Objects and Request Scopes. This ensures accurate billing based on warranty terms while enhancing efficiency in warranty administration.

Service warranties outline the privileges of the customer regarding service, pricing, and service level agreements (SLAs), including the commencement and expiration of the warranty period. Customer warranties are typically provided for an object following a sale, installation, or repair. When handling service requests, customer warranties are utilized to establish pricing and SLAs for the item undergoing servicing. Service warranties are applicable across all industries that cater to customer-owned equipment.

Benefits include:

- Supports both customer and supplier warranties within Request Management, streamlining warranty-related processes across the application.
- Simplifies warranty management, making it easier for businesses to administer warranty claims in high-volume, product-centric industries.
- Efficient warranty tracking enables faster resolution of claims, repairs, and replacements, enhancing customer satisfaction.
- Ensures that service requests are correctly billed based on warranty terms, preventing overcharging or missed warranty claims.

Warranty Type Templates (25R1↗)

Customer Warranty Type Templates (25R1↗)

 *Part Master Data>Warranty>Customer Warranty Type Template*

A Customer Warranty Type Template is used to create predefined customer warranties for an object, such as a rust-proof warranty. It involves defining **Warranty Conditions** and connecting them to the warranty type template, which is then used when connecting warranty types to objects in IFS Cloud. **Translations** can be used to store language-dependent document text, which can be used on invoices, customer confirmations, or sales quotations.

For use in NGSM (i.e., to apply warranties to Models and Service Objects) enable the **Use in Service** flag to be able to select SLA Template and to choose a mandatory Price Rule, which provides more flexibility than the Cost Types. Price rules can be utilized to define whether – in a warranty case – the customer must pay for material, expenses, etc.

Part Master Data > Warranty > Customer Warranty Type Template

Customer Warranty Type Template

Search (3)

Sort by	<<	2YR-01	>>	3 of 3
1YR-01				
1YR-02				
2YR-01				

+

Template ID: 2YR-01 **Description:** 2 year HVAC Manufacturer warranty **Note:** Yes

Notes: This warranty covers all costs as per European law

Cost Types:

SLA and Price Rule: Price Rule: 0 - Free of Charge SLA Template: 20 - Silver

Warranty Condition:

Condition	Min Value	Max Value	Time Unit	Other UoM
2 - Warranty - 2 year full	0	2	Year	

Translation:

Language Code	Description	Document Text
(No data)		

Supplier Warranty Type Templates (25R1)

Part Master Data>Warranty>Supplier Warranty Type Template

A Supplier Warranty Type Template is used to create predefined supplier warranties for an object in IFS Cloud. It involves defining warranty conditions and connecting them to the warranty type template, which is then used when connecting warranty types to objects.

For use in NGSM (i.e., to apply warranties to Models and Service Objects) enable the **Use in Service** flag to be able to select a Price Rule, which defines for several cost types (e.g., material, expenses, labor, etc.) whether the supplier will pay for these costs when the warranty is valid. If **Convert To Customer Warranty** is enabled, a Customer Warranty will be created with the same information as the Supplier Warranty when the part is received into inventory.

Part Master Data > Warranty > Supplier Warranty Type Template

Supplier Warranty Type Template

Search

Sort by ▾

10 20 30

+ 🗑️ 🖊️ 🗑️ 📡 Translation

Template ID	Description	Customer Order Connection	Convert To Customer Warranty										
10	1 year all inclusive	Yes	Yes										
<input checked="" type="checkbox"/> Use in Service													
Cost Types													
Pricing													
Price Rule 10 - Premium Pricing													
Note 													
<table border="1"> <thead> <tr> <th>Condition ID</th> <th>Min Value</th> <th>Max Value</th> <th>Time Unit</th> <th>Other UoM</th> </tr> </thead> <tbody> <tr> <td>1 - Warranty - 1 year full</td> <td>0</td> <td>1</td> <td>Year</td> <td></td> </tr> </tbody> </table>				Condition ID	Min Value	Max Value	Time Unit	Other UoM	1 - Warranty - 1 year full	0	1	Year	
Condition ID	Min Value	Max Value	Time Unit	Other UoM									
1 - Warranty - 1 year full	0	1	Year										
24													

Warranty Conditions (📝)

Part Master Data>Warranty>Warranty Conditions

Warranty conditions are the basic entities of warranty handling. They are defined and then used in warranty type templates, which are subsequently connected to objects. These conditions can include restrictions based on time, size, or distance, with minimum or maximum values defining the restriction.

The **Time Unit** or **Other U/M** in combination with **Min Value** and **Max Value** defines whether a condition evaluates to TRUE, meaning the warranty applies. An example would be the conditions “0..2 Years” and “0..100,000km”, which in combination would define a 2-year warranty, but only when mileage doesn’t exceed 100,000 kilometers.

For time-related conditions, units such as day, month, or year are used. If the condition involves size or distance, the **Other U/M** column is utilized. Values for these conditions can be added later in the process, and the condition ID is automatically generated by the system.

Warranty Conditions

 Search

Translation

Condition ID	Condition Description	Min Value	Max Value	Time Unit	Other U/M
1	Warranty - 1 year full	0	1	Year	
2	Warranty - 2 year full	0	2	Year	
3	Warranty - 3 year full	0	3	Year	
4	Rust Protection	0	10	Year	
5	Max. 100,000 km	0	100000		km

Warranty Assessments (25R1★)

Service>Basic Data>Work Task Basic Data>Warranty Assessments

Warranty Assessments enable users (both backoffice and MWO) to document instances where an existing warranty may be void, such as situations involving equipment misuse. This process informs the back office that further evaluation of the task is necessary, ensuring all relevant conditions are thoroughly reviewed prior to taking further action.

Selecting an assessment with **Disconnect Warranty** will automatically remove the customer warranty from the request scope. **Update Object Warranty** will expire the customer warranty on the Service Object.

Warranty Assessments

 Search

Update Object Warranty Validity

Warranty Assessment ID	Description	Disconnect Warranty	Yes	No	Active
REPLACEMENT COUNT ...	Number of materials replaceable under warranty has reached	No	Yes	Active	
NOT REPORTED IN TIME	The reporting of the request violates the terms and conditions	Yes	No	Active	
MISUSE	Improper use or misuse	Yes	Yes	Active	
EXPIRED	Expired warranty	Yes	Yes	Active	

Backoffice users can trigger the assessment using the **Assessment** command on the Request Work Task.

Service Management > Request Management > Task Handling > Request Work Task

Request Work Task

Search (1)

Sort by ▾

635
Description: Corrective Maintenance
Actual Item Description: Ventechi Z series units
Released

635 - Corrective Maintenance 1 of 1

Task Details

Task No	Task Description *	Created Date
635	Corrective Maintenance	7/16/25, 2:35 ...
Long Description	Request	Scope
Corrective Maintenance	308 - KB ...	310
Invoicing Info	Customer	FTFP
EUR	NL20103 - Van Buren Hotel	... %

Dependencies (0) Warranty Edit Location Admin Transfer To Mobile

Location and Address

Location	Assessment
914 - Joan Muykenweg 2...	Assessment
Address	Joan Muykenweg 20 Amsterdam, 1096 CJ NL -
Open Map	

A warranty can be assessed multiple times, generating an event in the Event Log for each assessment. However, only the latest assessment information is shown in the Item Details section of the task. Warranty Assessment information is available in the Event Log of the Request and the Request Work Task.

Service Management > Request Management > Request Handling > Request Details

Request

Search (1)

Sort by ▾

308
Description: KB Test
Created: 7/16/25, 2:35 PM
Created By: TISCNL
Customer: NL20103
Source: Manual
Released

308 - KB Test 1 of 1

New Edit Location Cost and Sales Create Contractor Order Appointment Booking SLA Overview Admin Knowledge Articles (2)

Request ID Description * Customer Primary Contact

308	KB Test	NL20103 - Van Buren Hotel Amsterdam-A...
-----	---------	--

Request Information Location and Address

Classification Ownership

SERVICES TASKS SLA PRICE SUMMARY CONTACTS SERVICE NOTES SURVEYS AND ANSWERS

Attachments

CASE DOCUMENTS MEDIA EVENTS

Add Event

Event Event Description Event Type Description Source Created Date Created By Note

<input type="checkbox"/> WARRANTY_ASSESSED	WARRANTY ASSESSED	Work Task	7/17/25, 11:37 AM	TISCNL
<input type="checkbox"/> CREATED	Created	Srv Request	7/16/25, 2:35 PM	TISCNL
<input type="checkbox"/> NEW	New	Status Change	7/16/25, 2:35 PM	TISCNL

Part Warranties (25R1)

Standard Customer and Supplier Warranties can be defined on the Part, Inventory Part, Sales Part, Non-Inventory Sales Part and Part Serial Pages.

Part Master Data > Master Part > Part

Part

Search (1)

Sort by ▾

VTZSR55
Description: Ventechi Z series units

VTZSR55 - Ventechi Z series units 1 of 1

Part No Description * Part Details Warranty Engineering Eco-footprint Part Information

VTZSR55	Ventechi Z series units	Customer Warranty	Supplier Warranty
---------	-------------------------	-------------------	-------------------

Warranty Types can be populated from templates (see [Warranty Type Templates \(25R1P\)](#)) or created manually. Make sure that **Use in Service** is enabled to make the warranty available in Service Management. In this case a Price Rule is mandatory, an SLA template can be specified if needed.

Customer Warranty

Part No	Customer Warranty ID									
VTZSR55 - Ventechi Z series units	736									
Warranty Types										
<input type="button" value="Delete"/> <input type="button" value="Done"/> <input type="button" value="Cancel New"/>										
Warranty Type ID	Description	Material Cost	Expenses	Fixed Price	Personnel Cost	External Cost	Note	Use in Service	Price Rule	SLA Template
2YR-01	2 year HVAC Manufacturer warranty	<input checked="" type="checkbox"/>	40 - La...	20 - Sil...						
									0 - Free of C...	20 - Silver
This warranty covers:										

Warranty Conditions

Condition	Min Value	Max Value	Time Unit	Other UoM
(No data)				

Warranty Language Descriptions

Language Code	Warranty Type Description	Document Text
(No data)		

The benefit of defining standard warranties on a part is that every time a service object is created using this part, warranty information is populated automatically. The same approach is possible by defining standard warranties on a model (see [Models \(25R1P\)](#)).

Service Object Warranties (25R1↗)

When a service object is created, warranties will be inherited from the associated part and/or model. In addition, warranties can also be maintained on the individual service object.

Warranties defined on the Service Object will be used on Request Scopes created for the object when the scope is created within the warranty validity period. The **In Warranty** flag indicates that the warranty start date has passed already and <today> is still before the end date. The **Ready to Use** flag indicates that the warranty line contains all required information, the warranty has a service coverage defined, and “In warranty” = Yes.

Note: If the object warranty is created without a template or was not instantiated, all information including the Service Coverage must be entered manually.

[Service Management > Installed Base > Service Object](#)

Service Object

Search (1)

Sort by ▾ << NLVTZ2097 - Ventechi Z series units ▾ 1 of 1

Service Object 360 | Part Serial | Copy | Move | Operational Status | Measurements for Object | Rename Serial | Heart

Model VTZSR - VENTECHI-Z SERIES	Object ID NLVTZ2097	Description Ventechi Z series units	Operational Status In Operation	Operational Condition Operational	Object Classification Serial
Location & Address 914 - Joan Muyskenweg 20, NL		Primary Customer			

DETAILS SPARES SKILLS WARRANTIES PARTIES SERVICE NOTES

Customer Warranty New ▾

(1)	Warranty ID	Warranty Type	Warranty Type ID	Description	Status	Valid From	Valid To	Supplier	Price Rule	SLA Template
534	Customer	2YR-01		2 year HVAC Manufacturer warranty	Active	5/26/2025	5/26/2027		0 - Free of Charge	20 - Silver

CONDITIONS

Condition	Condition Description	Min Value	Max Value	Time Unit	Other UoM	Test Point	Parameter
2	Warranty - 2 year full	0	2	Year			

Warranties with Sales Orders (25R1)

Folder Sales>Part>Sales Part

If **Create SM Object** is enabled on the sales part, the service object will be created automatically when customer order lines are delivered. If warranties were defined on the part and/or sales part, they will be inherited by the newly created service object.

[Sales > Part > Sales Part](#)

Sales Part

Search (1)

Sort by ▾ << VTZSR55 - Ventechi Z series units - 2501 ▾ 1 of 1

Inventory Part Availability Planning | Complementary Parts | Substitute Sales Part | Inventory Part | Document Text | Customer Warranty | Heart

Sales Part No VTZSR55	Part Description In Use * Ventechi Z series units	Site 2501	Sales Type * Sales Only	Active																																																															
<table border="1"> <thead> <tr> <th>GENERAL</th> <th>DESCRIPTIONS</th> <th>CHARACTERISTICS</th> <th>CHARGES</th> <th>CONDITION CODE PRICING</th> <th>Maintenance</th> <th>PART SPECIFIC OVERHEADS</th> </tr> </thead> <tbody> <tr> <td>Inventory Part</td> <td></td> <td></td> <td></td> <td></td> <td>Sourcing</td> <td></td> </tr> <tr> <td>Unit Of Measure</td> <td></td> <td></td> <td></td> <td></td> <td>Grouping</td> <td></td> </tr> <tr> <td>Pricing</td> <td></td> <td></td> <td></td> <td></td> <td>Tax</td> <td></td> </tr> <tr> <td>GTIN</td> <td></td> <td></td> <td></td> <td></td> <td>Miscellaneous</td> <td></td> </tr> <tr> <td>Indicators</td> <td></td> <td></td> <td></td> <td></td> <td>Replacement Part</td> <td></td> </tr> <tr> <td>Primary Sales Part</td> <td>Quickly Registered Part</td> <td>Export to External Application</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Create SM Object</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Document Text No</td> <td></td> <td>Customer Warranty Yes</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>					GENERAL	DESCRIPTIONS	CHARACTERISTICS	CHARGES	CONDITION CODE PRICING	Maintenance	PART SPECIFIC OVERHEADS	Inventory Part					Sourcing		Unit Of Measure					Grouping		Pricing					Tax		GTIN					Miscellaneous		Indicators					Replacement Part		Primary Sales Part	Quickly Registered Part	Export to External Application					Create SM Object							Document Text No		Customer Warranty Yes				
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Create SM Object																																																																			
Document Text No		Customer Warranty Yes																																																																	

Warranties with Purchase Orders (25R1)

Folder Procurement>Part>Supplier for Purchase Part

Supplier Warranties can be defined on the purchase part (can differ by supplier). When the part is issued on a Request and placed into the equipment structure, the supplier warranty information is inherited by the newly created Serial Service Object.

Procurement > Part > Supplier for Purchase Part

Supplier for Purchase Part

Search (1)

F12493 - Return Air Diffuser - 2501 - 10002 1 of 1

Part	Supplier	Supplier Contact	Site
F12493 - Return Air Diffuser	10002 - WLA Onderdelen BV	null	2501
Active	Document Text	No	

Warranties on Requests (25R1)

Warranty will be automatically applied on Request Scopes based on the combination of Service and Service Object. The warranty that has the closest expiration date out of all matching warranties will be applied. If a valid warranty was found, **View Warranty** opens a panel with all warranties and their applicability.

A contract line and a warranty are separate options. When both are applicable, the warranty takes precedence. However, users can choose to bypass a valid warranty in favour of the contract or service by disabling the **Under Warranty** toggle.

Service Management > Request Management > Request Handling > New Request

New Request

Request Information

Description * Repair Request

Described Problem/Symptom

Customer Reference

Customer Information

Location and Address

Reported Item

Model VTZSR - Ventechi-Z Series

Object NLVTZ2097 - Ventechi Z series units

Show all Objects

Under Warranty

View Warranty

Service and Contract Information

Service Type 20 - Corrective Maintenance

Service 20 - Corrective Maintenance

Service Organization * 1102 - Ventechi US West

Service Delivery Unit

Contract

Classification

Filter Urgency based on Service

Urgency

Priority

SLA and Price Rule

SLA Template 20 - Silver

Price Rule 0 - Free of Charge

SLA Source **Warranty**

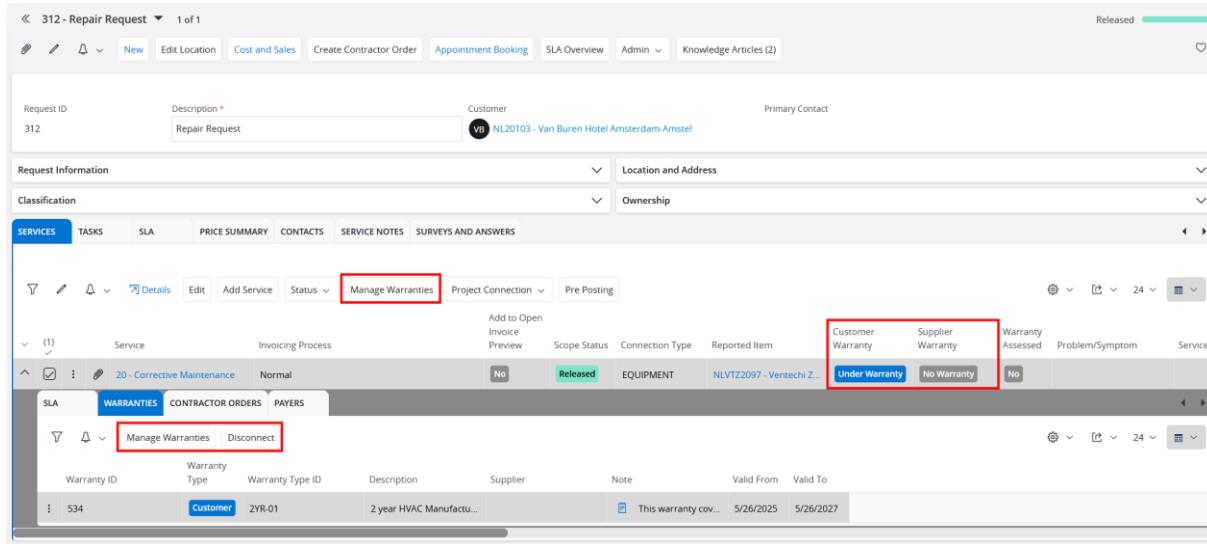
Price Rule Source **Warranty**

Once applied, the warranty will set the price rule for the service/scope. It can also change the SLA for a scope if an SLA template is defined for the warranty.

This behavior is also supported in the **Add Service**, **Edit**, **New Request Quotation**, and **New Request Quotation Scope** assistants.

Warranties on Request Scopes/Services (25R1)

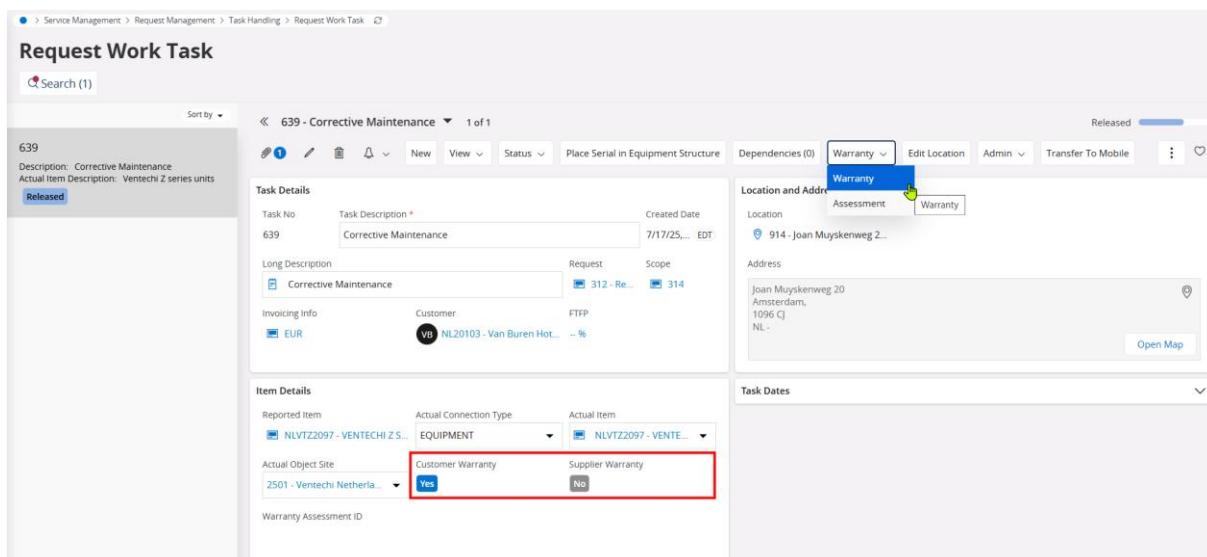
Customer and Supplier Warranties can be viewed on the Request's Services page. Each Scope/Service will indicate whether a Customer Warranty and/or Supplier Warranty has been applied. **Manage Warranties** allows modifying the warranty on the scopes. Each scope can have one Customer Warranty and multiple Supplier Warranties applied at a time.



Note: Updating the **Reported Item** on the Scope may update the warranty information where applicable.

Warranties on Request Tasks (25R1)

The **Customer Warranty** and **Supplier Warranty** badges indicate whether warranties are applied to the task. Warranties applied on the Request Scope cover all associated Request Work Tasks, details can be viewed using the **Warranty** command.



For a service under warranty, any charges follow the Customer Warranty Price Rule, with duplicated sales lines for any Supplier Warranty/s Price Rule. The **Set Revenue 0%** and **Set Revenue 100%** commands allow manual adjustment of the revenue percentage for sales lines.



A screenshot of the IFS Cloud interface. The top navigation bar includes links for Resources, Assignments, Work Steps, Material, Contractor Orders, Returns, SLA, Time Reports, Planned Cost and Sales, Costs, Sales (which is highlighted in blue), Service Notes, and Surveys and Answers. Below the navigation is a toolbar with icons for search, add, edit, delete, and refresh. A text input field says "Document Text" with "Set Revenue 100%" typed into it. A red box highlights this text input field. The main area shows a table with one row of data. The columns are: Invoicing Info (with a dropdown menu showing '(1)', checked, and 'No Preview' selected), Sales Line No (29), Cost Type (Personnel), Sales Part Site (2501), Sales Part No (10.01), Description (Normal Time), Quantity (2.5), Quantity to Invoice (2.5), Unit Sales Price/Curr (100.00), Sales Price Amount/Base (0.00), Sales Price Amount/Curr (0.00), Prel Invoice No, and Invoice No.

Warranty Handling in MWO (25R1★)

Please refer to [MWO Demystified](#).

Knowledge Management ⚡ (25R1★)

Service organizations often face challenges in sharing, accessing, and organizing knowledge, resulting in delays, inefficiencies, and inconsistent information. This affects decision-making and service quality, making it hard for users to quickly find relevant knowledge.

To address these issues and provide consistent and accurate information, IFS Cloud provides knowledge management features such as AI-assisted creation of knowledge articles based on completed work in the field, support for manual creation of articles, suggested articles in the context of requests and tasks, and a feedback process

Concept (25R1★)

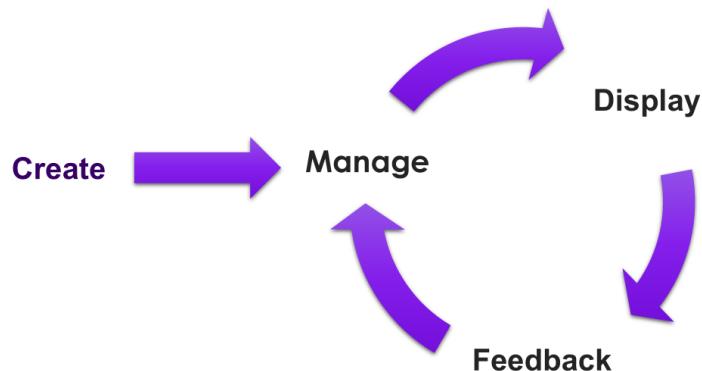
Recording significant events following service visits is important for organizations seeking to reduce the repetition of errors and improve operational efficiency. Sharing knowledge can help enhance service quality, but producing knowledge articles often requires considerable time. The AI-based Knowledge Article Generation feature supports this process by assisting with the creation of articles after service visits, allowing authors to concentrate on content rather than layout or grammar.

Knowledge Management involves the creation, management, display, and feedback of Knowledge Articles. These articles are intended to provide information on resolving specific issues, troubleshooting objects, or sharing other relevant knowledge. The flow of a knowledge article throughout its lifetime is as follows:

- **Creation:** Articles can be manually created or generated from a completed Request Work Task.
- **Handling:** Ensure the accuracy of the article's content before it is displayed and utilized as a reference in various contexts.
- **Display:** Present pertinent information in appropriate situations.
- **Feedback:** Maintain the content's relevance and quality.

Request Management: Knowledge Management Introduction of Knowledge Management

Concept: Knowledge Management in Service

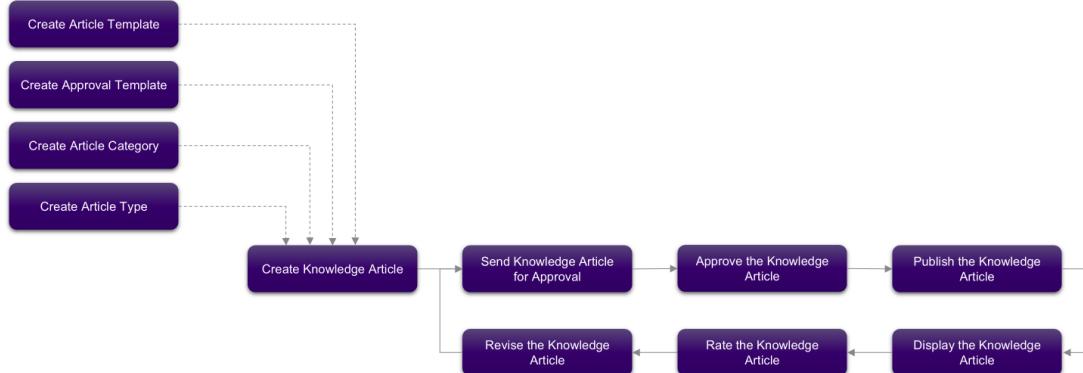


Having access to accurate and context-specific information enhances service outcomes, as storage and classification features ensure knowledge is organized and easily accessible. This reduces time spent searching for information, allowing more time for job-related tasks.

Request Management: Knowledge Management

Introduction of Knowledge Management

Concept: Flow of a Knowledge Article



Knowledge Management Setup

Article Categories (25R1★)

 Service Management>Basic Data>Knowledge Management>Knowledge Article Basic Data>Article Categories

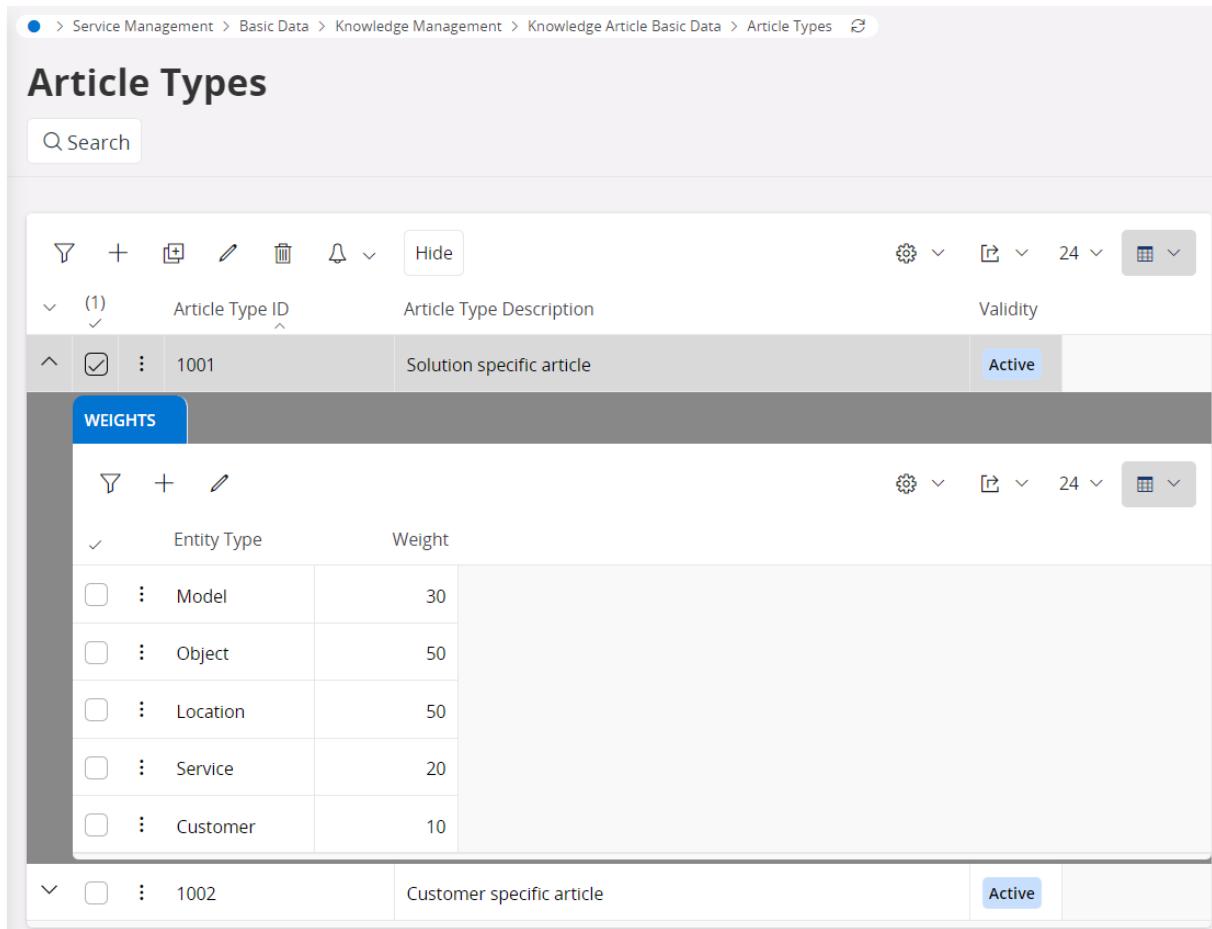
Article categories help filter and sort knowledge articles, and each article can have multiple categories.

	Article Category	Description
<input type="checkbox"/>	KBC101	Asset Inventory
<input type="checkbox"/>	KBC102	Maintenance and Repair
<input type="checkbox"/>	KBC103	Operational Guidelines
<input type="checkbox"/>	KBC104	Documentation

Article Types (25R1★)

📁 Service Management>Basic Data>Knowledge Management>Knowledge Article Basic Data>Article Types

Article Types are not only used for categorization, but also for determining the weights assigned to each entity type i.e., Object, Model, Service, Location, or Customer. The entity will be referred to as Tag Type on the knowledge article. Weight determines the display order of articles.



Article Type ID	Article Type Description	Validity
1001	Solution specific article	Active

WEIGHTS	
Entity Type	Weight
Model	30
Object	50
Location	50
Service	20
Customer	10

Approval Templates (25R1★)

📁 Service Management>Basic Data>Knowledge Management>Knowledge Article Basic Data>Approval Template

Approval Templates use the standard approval framework of IFS Cloud Document Management (see [Approvals](#)). A template is a predefined set of steps to streamline the approval process. It allows users to set up specific approval workflows that are automatically applied to new Knowledge Articles that are based on different Article Templates. This helps ensure consistency and efficiency in the approval process.

Approval Steps must be completed in the provided sequence e.g., step 1 must be approved before step 2, if step 1 is rejected, step 2 cannot begin. Each step can be approved by either an individual person or by any member of an approver group.

Service Management > Basic Data > Knowledge Management > Knowledge Article Basic Data > Approval Template

Approval Template

Search

Sort by ▾

KBA-101
Description: Technical Article approval

KBA-102
Description: Customer Article approval

« KBA-101 - Technical Article approval ▾

+ 🖍️ 🗑️ 📡

Approval Template Description *
KBA-101 Technical Article approval

Approval Steps

Copy Approval Template

Approval Step	No	Description	Person ID	Group ID	Security Checkpoint Required
<input type="checkbox"/>	1	Technical Review		K-01 - Technical KB Reviewers	No
<input type="checkbox"/>	2	Security Review		K-02 - Security KB Reviewers	No
<input type="checkbox"/>	3	Textual Review		K-03 - Textual KB Reviewers	No

Article Templates (25R1★)

Service Management>Basic Data>Knowledge Management>Knowledge Article Basic Data>Article Template

Article Templates are only utilized when manually creating Knowledge Articles. An Article Template helps establish the fundamental structure of a knowledge article. It includes the layout with predefined headers and provides guidance on the type of information to be included under each header. It is also possible to specify a fixed title, choose categories, and set visibility options.

When employing a predefined template, the new article will inherit essential attributes such as Title, Article Category, Approval Template, Article Type, and Visibility.

It is possible to assign **Article Categories** (see [Article Categories \(25R1★\)](#)) to a knowledge article to make filtering and grouping easier.

An **Approval Template** can be added to an article to trigger an approval process (see [Approval Templates \(25R1★\)](#)).

Service Management > Basic Data > Knowledge Management > Knowledge Article Basic Data > Article Template

Article Template

Search:

Sort by:

KBA-1001	Title: How to Troubleshoot [HVAC Object / Model Name]	Article Type: 1001 - Solution specific article	Visibility: Internally and ...	Category: (2) KBC102; KBC101
KBA-1002	Title: How to Troubleshoot [Turbine Object / Model Name]			

Approval Template: KBA-101 - TECHNICAL ARTICLE APPROV...

Article Content:

How to troubleshoot [System/Device Name]

Introduction

This article provides a comprehensive guide to managing HVAC equipment assets effectively. It covers best practices, maintenance schedules, and troubleshooting tips to ensure optimal performance and longevity of HVAC systems. A quick guide to help you troubleshoot some common issues with [System/Device Name].

.....

Issue: Air Conditioner Not Cooling

****Possible Causes:****

- * Dirty Air Filter: Restricts airflow, causing the system to work harder and cool less effectively.
- * Low Refrigerant Levels: Insufficient refrigerant can prevent the system from cooling properly.
- * Faulty Thermostat: Incorrect temperature readings can lead to improper cooling cycles.
- * Blocked Condenser Unit: Debris around the condenser can impede heat exchange.

Structure of AI Generated Article (25R1★)

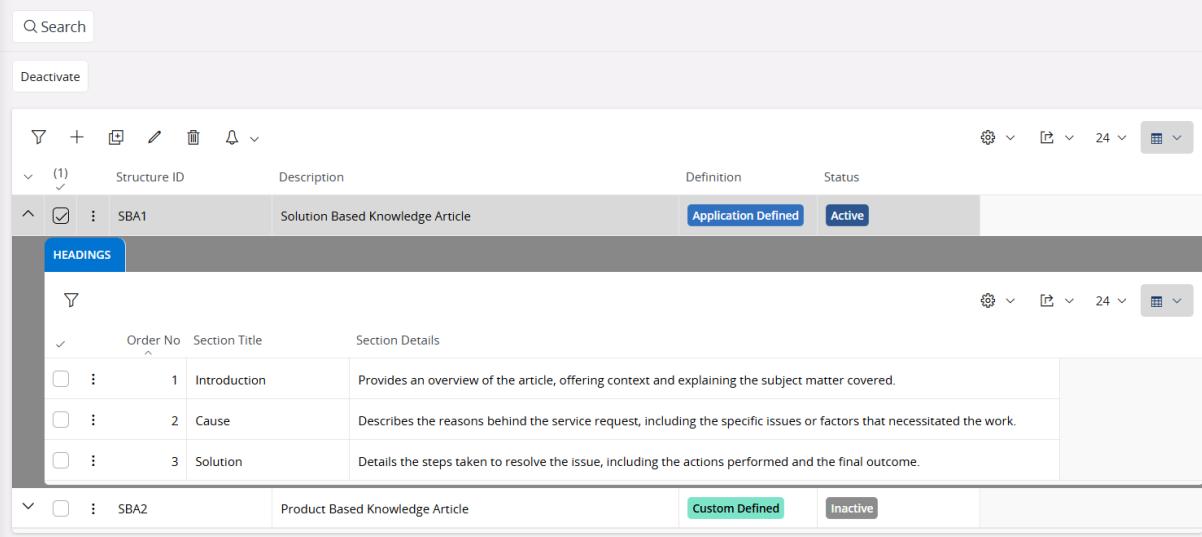
Service Management>Basic Data>Knowledge Management>Knowledge Article Basic Data>Structure of AI Generated Article

A uniform structure and layout for AI-generated knowledge articles can be established through the use of predefined structures. Each record defines a consistent format for knowledge articles created from a Request Work Task. Although multiple structure definitions can be maintained, only one record may be active at any given time.

The **Section Titles** will determine what will appear in the article content when the knowledge article is generated, **Order No** defines sequence.

Section Details provides instructions or additional context to the LLM to determine what information should be included under this specific section in the article content.

Structure of AI Generated Article



Order No	Section Title	Section Details
1	Introduction	Provides an overview of the article, offering context and explaining the subject matter covered.
2	Cause	Describes the reasons behind the service request, including the specific issues or factors that necessitated the work.
3	Solution	Details the steps taken to resolve the issue, including the actions performed and the final outcome.

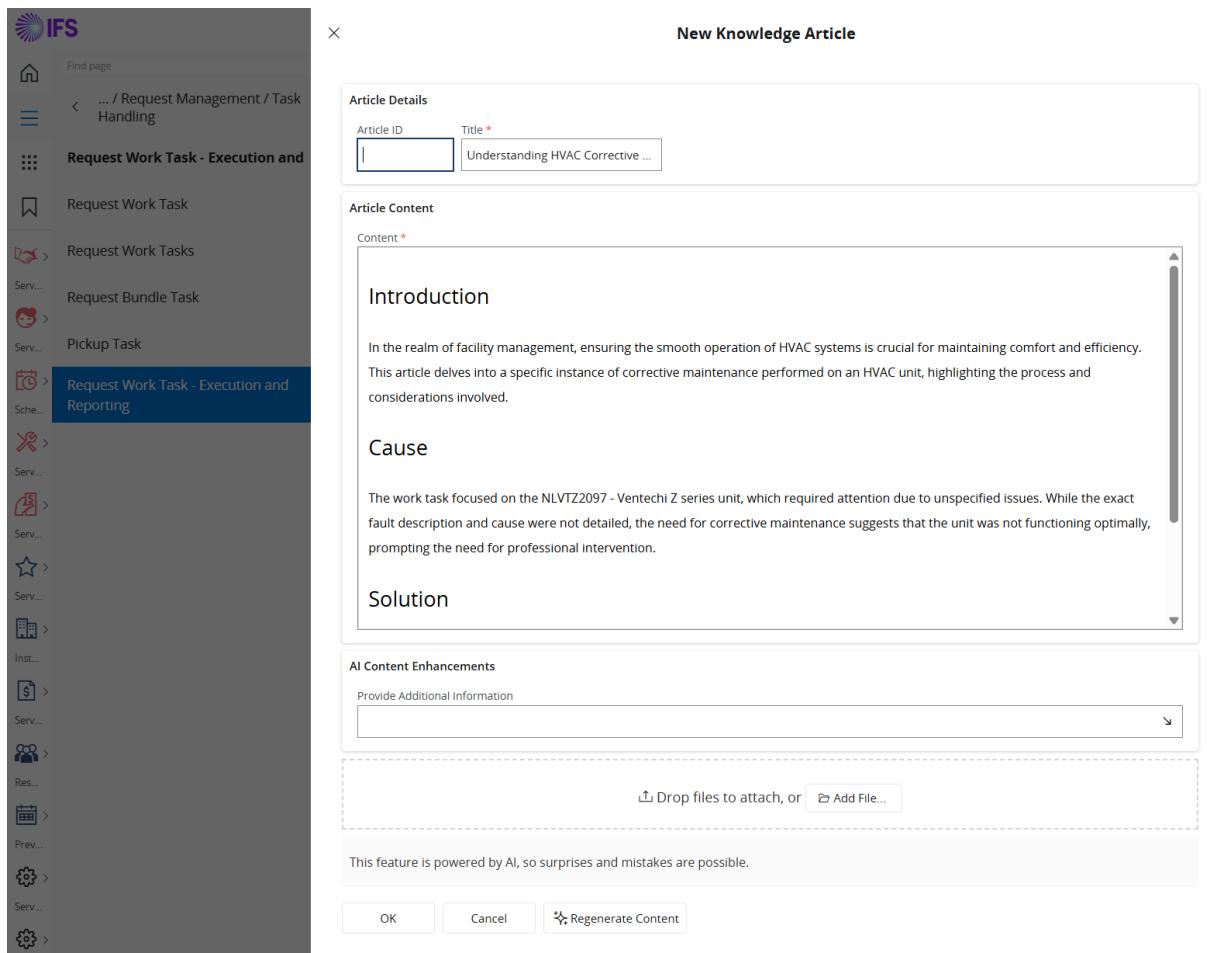
Generate Knowledge Article from Request Work Task ⚡ (25R1★)

 *Service Management>Request Management>Task Handling>Request Work Task - Execution and Reporting*

When a Request Work Task is in Status Work Done or Finished, the **Generate Knowledge Article** command becomes available. The LLM generates a title and article content in Markdown format, both can be edited as needed.

The following details are considered for the knowledge article content:

- Request Description
- Service
- Actual Item
- Fault Type
- Fault Description
- Cause Description
- Item Class
- Performed Work
- Consumed Parts



It's also possible to provide enhancement instructions to the LLM by putting them into the **Provide Additional Information** field and then selecting **Regenerate Content**. Here's an example of the original content and the revised content after specifying "Use simpler language":

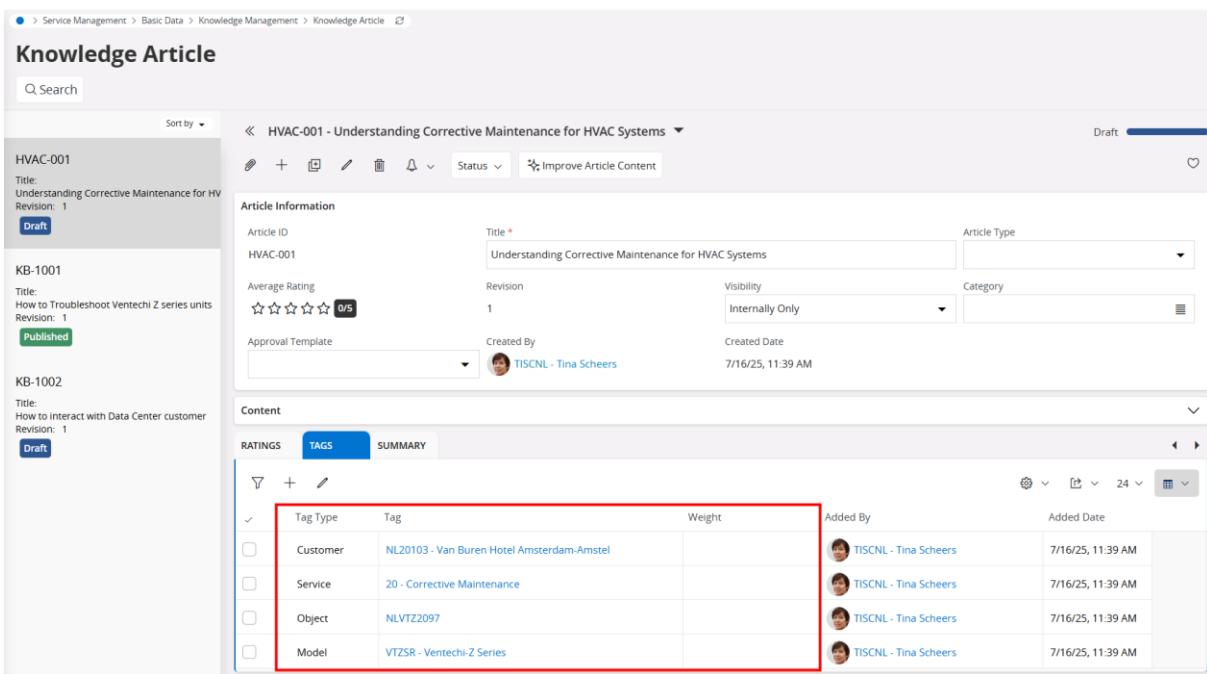
Initial content	Revised content
<pre>## Introduction In this article, we delve into the intricacies of corrective maintenance, specifically focusing on HVAC repair tasks. HVAC systems are crucial for maintaining comfortable indoor environments, and when they malfunction, prompt corrective actions are necessary to restore their functionality. This article provides insights into a specific</pre>	<pre>## Introduction This article explores the world of fixing HVAC systems, focusing on what happens when they need repairs. HVAC systems are essential for keeping indoor spaces comfortable, and when they break down, quick repairs are needed to get them working again. We'll look at a specific repair job, discussing why it was needed and how it was fixed.</pre>

Initial content Revised content

HVAC repair task, highlighting the causes and solutions involved.

...

The newly created article will automatically be tagged with Customer, Service, Object, and Model from the underlying Request Work Task.



The screenshot shows the 'Knowledge Article' creation screen. In the top navigation bar, the path is: Service Management > Basic Data > Knowledge Management > Knowledge Article. The main area is titled 'Knowledge Article' with a sub-section 'HVAC-001 - Understanding Corrective Maintenance for HVAC Systems'. The status is 'Draft'. The 'Article Information' section includes fields for Article ID (HVAC-001), Title (Understanding Corrective Maintenance for HVAC Systems), Average Rating (4.5), Revision (1), Visibility (Internally Only), and Created By (TISCNL - Tina Scheers). The 'Content' section has tabs for 'RATINGS', 'TAGS' (which is selected), and 'SUMMARY'. A table lists tags with columns: Tag Type, Tag, Weight, Added By, and Added Date. The table rows are:

Tag Type	Tag	Weight	Added By	Added Date
Customer	NL20103 - Van Buren Hotel Amsterdam-Amstel		TISCNL - Tina Scheers	7/16/25, 11:39 AM
Service	20 - Corrective Maintenance		TISCNL - Tina Scheers	7/16/25, 11:39 AM
Object	NLVZ2209		TISCNL - Tina Scheers	7/16/25, 11:39 AM
Model	VITZSR - Ventechi-Z Series		TISCNL - Tina Scheers	7/16/25, 11:39 AM

Selecting an **Article Type** will give each tag an additional weight (see [Article Types \(25R1★\)](#)). This is used to determine the order in which articles should be suggested in different contexts.

An article can also be associated with one or multiple **Categories** (see [Article Categories \(25R1★\)](#)).

Visibility determines whether the article is visible for internal and/or external users. Knowledge Article will only appear as a suggestion on *Request Work Task* and on *Request Details* if the visibility is set to **Internally** or **Internally and Externally**.

Articles must be approved and published prior to being available to end users. Modifications to approved articles are carried out by creating new revisions, which designate the previous version as obsolete and remove it from suggested articles.

Manual Creation of Knowledge Articles (25R1★)

📁 [Service Management>Basic Data>Knowledge Management>Knowledge Article](#)

While it's possible to generate new articles from Request Work Tasks automatically, they can also be created from scratch. Selecting an **Article Template** (see [Article Templates \(25R1★\)](#)) saves the author time and ensures a consistent format and structure.

Selecting an **Article Type** will give each tag an additional weight (see [Article Types \(25R1★\)](#)). This is used to determine the order in which articles should be suggested in different contexts.

An article can also be associated with one or multiple **Categories** (see [Article Categories \(25R1★\)](#)).

Visibility determines whether the article is visible for internal and/or external users. Knowledge Article will only appear as a suggestion on *Request Work Task* and on *Request Details* if the visibility is set to **Internally** or **Internally and Externally**.

Articles must be approved and published prior to being available to end users. Modifications to approved articles are carried out by creating new revisions, which designate the previous version as obsolete and remove it from suggested articles.

Generate Article Summary ⚡ (25R1★)

📁 [Service Management>Basic Data>Knowledge Management>Knowledge Article](#)

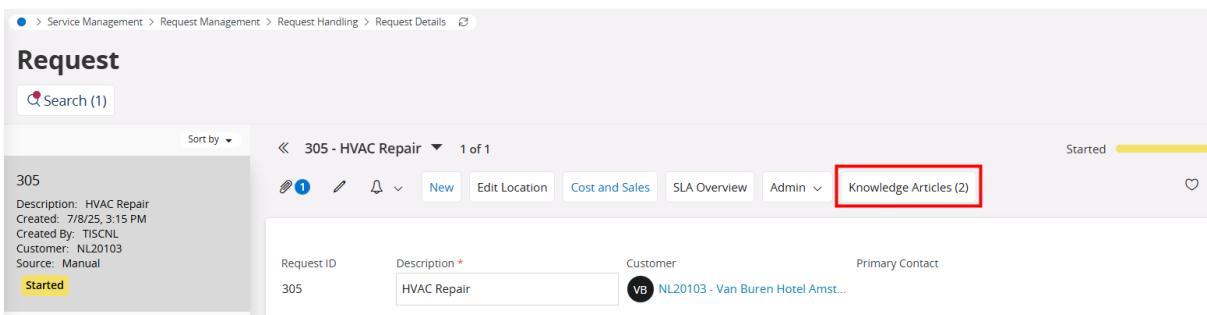
When a Knowledge Article is either Approved or Published, **Generate Article Summary** uses AI to create a summary of the article content.



The summary can be modified and re-generated as needed.

Using and Rating Articles (25R1★)

There is no need to explicitly search for Knowledge Articles, the availability of relevant articles is indicated by a number next to the **Knowledge Articles** button on the Request header and the Task header.



It will open a list with article previews with the possibility to view the complete article and also rate it. The rating is based on a scale of 1-5 stars with an optional comment.

Suggested Knowledge Articles

Understanding Correcti... 

Summary:
The article discusses HVAC system repairs, focusing on a specific case involving Ventechi Z series units. It highlights common issues like poor airflow and uneven temperatures, and emphasizes the importance of quick repairs to restore comfort by identifying problems, replacing parts, and ensuring smooth operation.

Average Rating
★★★★★  4/5

[View Full Article](#) [Rate Article](#)

How to Troubleshoot V... 

Summary:
This article offers troubleshooting tips for Ventechi Z series HVAC units, addressing issues like cooling, heating, unusual noises, short cycling, and high energy bills. Solutions include replacing filters, checking refrigerant levels, cleaning components, and ensuring proper thermostat settings and system sizing for optimal performance.

Average Rating
★★★★★  4/5

[View Full Article](#) [Rate Article](#)

[Close](#)

Rating details are available on the respective Knowledge Article, so that the author gets input for content improvements.

● > Service Management > Basic Data > Knowledge Management > Knowledge Article

Knowledge Article

 [Search \(\)](#)

Article Information		Published 	
Article ID	Title	Article Type	
HVAC-001	Understanding Corrective Maintenance for HVAC Systems	1001 - Solution specific article	
Title: Understanding Corrective Maintenance	Revision: 1	Visibility	Category
Obsolete		Internally Only	KBC102
HVAC-001			
Title: Understanding Corrective Maintenance	Revision: 2		
Obsolete			
HVAC-001			
Title: Understanding Corrective Maintenance	Revision: 3		
Published			

Content

RATINGS **TAGS** **SUMMARY**

Rating	Comment	Rated By	Rated Date	Rated from Entity	Rated from Reference
 5/5		 TISCNL - Tina Scheers	7/16/25, 2:39 PM	Request	307 - HVAC issue
 4/5		 TISCNL - Tina Scheers	7/16/25, 2:38 PM	Request	308 - KB Test

Structured Failure Management

Concept

Structured Failure Management (SFM) offers a structured approach to FRACAS (Failure Reporting, Analysis and Corrective Action System). It is based on *Failure Modes and Effects Analysis* (FMEA) and *Reliability Centered Maintenance* (RCM) thinking & theory with the goal of providing better and structured data for Root Cause Analysis.

The scope of SFM includes:

- Definitions of basic data for fault reporting and how different basic data is related to each other.
- Guidance in fault reporting based on the type of object, like filtered LOVs for Symptoms.
- Guidance in preparation – based on the reported symptom the application can suggest applicable corrective actions (as of 24R2 this only applies to work orders, not requests)
- Guidance in reporting-in – automatic fill of relevant fields based on actual cause to prepare the data for analysis.
- Enhanced support in Information Sources for analysis.

The classical FMEA model contains:

FMEA Term	IFS Cloud Entity
Part	Item Class (typically specified on the service object)
Function	Function. The functional requirement that an item is supposed to fulfill. This should ideally be quantified.
Functional Failure	Fault Type. How the item fails to deliver the intended function.
Failure mode	Cause. The reason it failed.
Effect	Symptom. This could be the local effect, next higher level effect or end effect. Usually this is what is visible to an end user observing a fault on the service object.
n/a	Corrective Action. How to fix the problem. As of 24R2 it is only possible to specify a work task template i.e., corrective actions only work with work orders, not with requests.

Item Class

 Service Management>Basic Data>Service Work Basic Data>Task Basic Data>Item Classes

The item class is the top-most element in the SFM tree and is used to hold the data related to a certain type of equipment. An item class can hold failure analysis data such as functions, fault types, symptoms, causes, failing components and corrective actions. Item classes can be arranged as a hierarchy and can inherit attributes from parent classes. Item classes are used for narrowing down options in the preparation and reporting stages of a work order and for failure analysis.

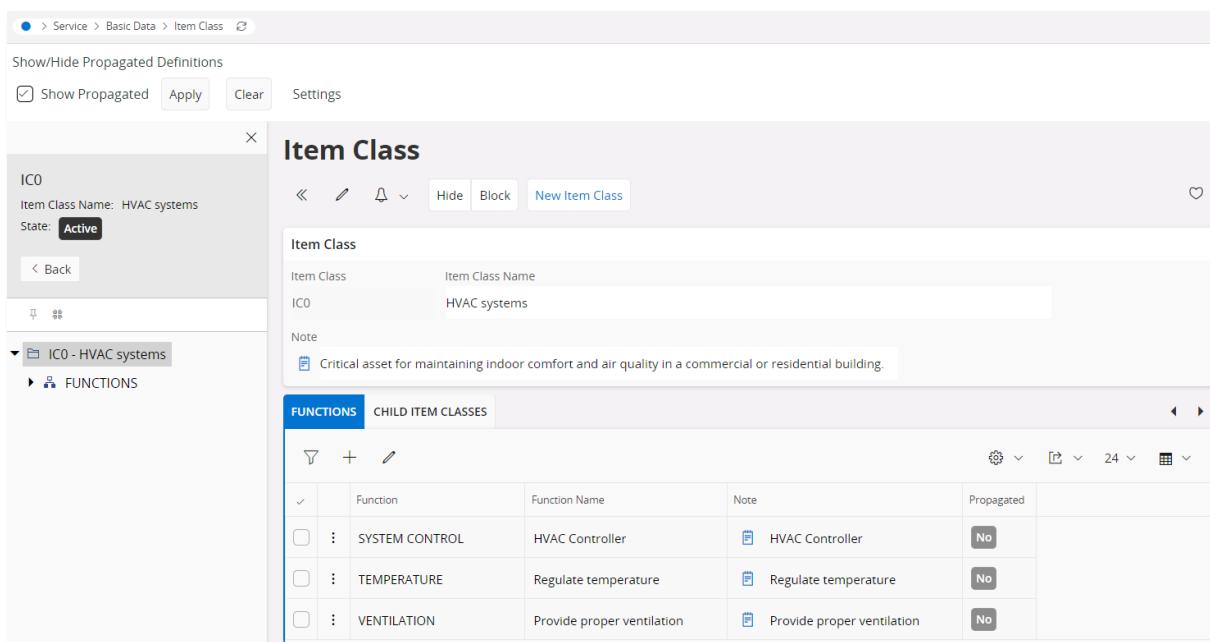
Item classes can be connected to service objects, equipment objects, parts, object types, linear asset segments, linear asset objects, segment types, linear asset types, tool/equipment objects, PM programs, and work task templates.

In PM program preparation, applicable work task templates, equipment objects, linear assets, and tool/equipment; are filtered down based on the item class. In fault reporting and entering work orders, the item class will be used to filter symptoms that are relevant to the type of equipment. In work order preparation, applicable work task templates/corrective actions are filtered down based on the item class and symptom.

On the work or request task, the item class is used to filter down applicable values for fault types, causes and functions. In analysis, item classes can be used in information sources, for example with IFS Business Reporter.

Functions

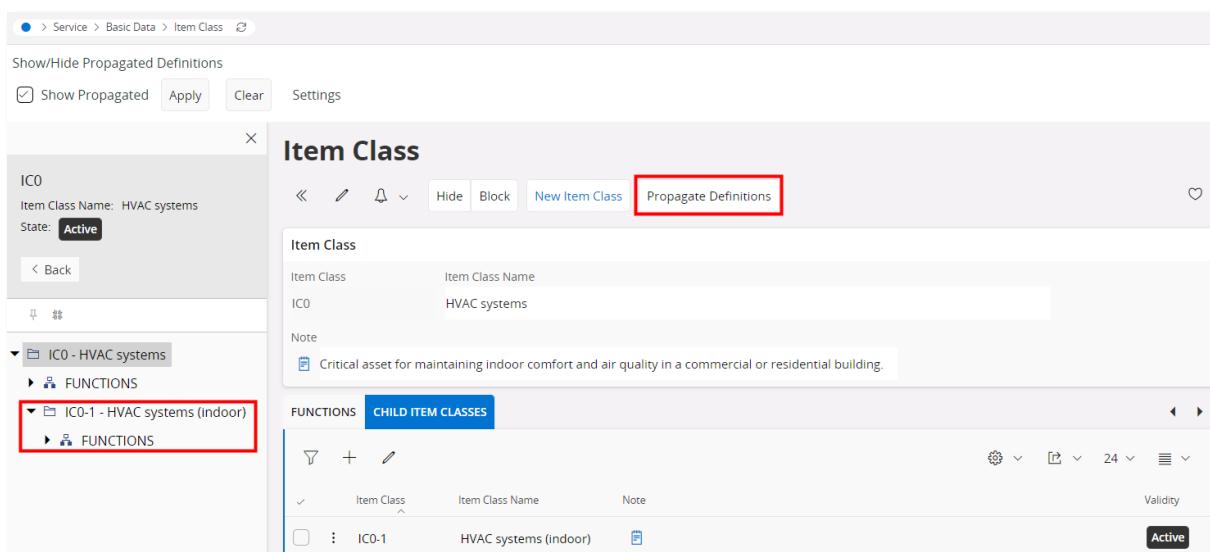
Every item class lists a number of functions that the associated equipment is supposed to fulfill:



The screenshot shows the 'Item Class' screen for 'ICO - HVAC systems'. The 'FUNCTIONS' tab is selected, displaying three entries:

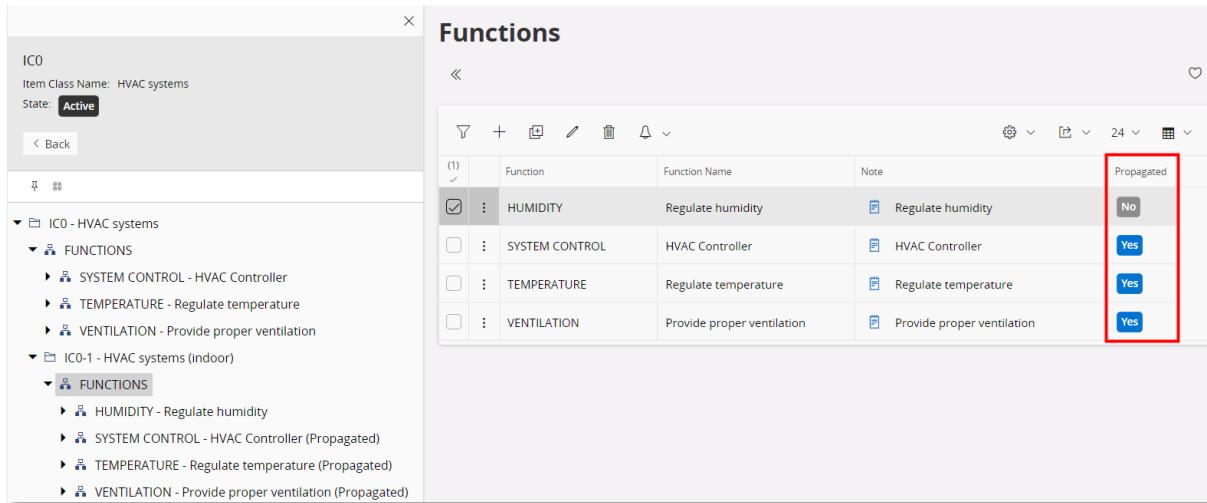
Function	Function Name	Note	Propagated
SYSTEM CONTROL	HVAC Controller	HVAC Controller	No
TEMPERATURE	Regulate temperature	Regulate temperature	No
VENTILATION	Provide proper ventilation	Provide proper ventilation	No

To ease the maintenance process, it is possible to define child item classes. The Propagate Definitions button will then copy all functions and their child records to the child item class:



The screenshot shows the 'Item Class' screen for 'ICO - HVAC systems'. The 'CHILD ITEM CLASSES' tab is selected, showing a single entry: 'ICO-1 - HVAC systems (indoor)'. The 'Propagate Definitions' button is highlighted with a red box.

This is indicated by the Propagated flag. Additional functions can be defined on the child item.



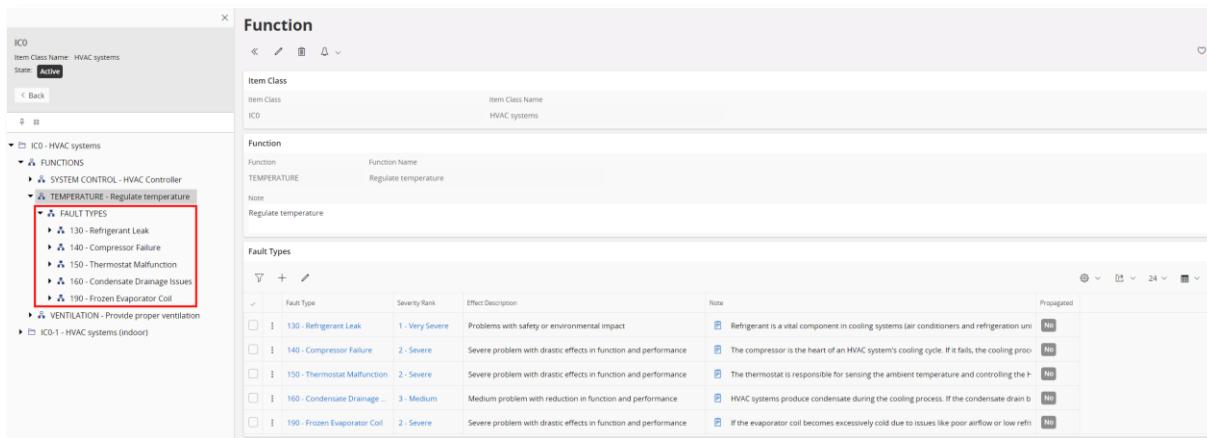
The screenshot shows the 'Functions' screen for an item class named 'HVAC systems'. On the left, a tree view shows 'ICO - HVAC systems' expanded, with 'FUNCTIONS' selected under it. Under 'FUNCTIONS', there are four items: 'SYSTEM CONTROL - HVAC Controller', 'TEMPERATURE - Regulate temperature', 'VENTILATION - Provide proper ventilation', and another 'FUNCTIONS' node for 'ICO-1 - HVAC systems (indoor)'. This second 'FUNCTIONS' node also contains the same three items. On the right, a table lists these functions with their names and notes. A column labeled 'Propagated' shows values: 'No' for the first function, and 'Yes' for the three functions under 'ICO-1 - HVAC systems (indoor)'. The 'Yes' values are highlighted with a red border.

Function	Function Name	Note	Propagated
<input checked="" type="checkbox"/> HUMIDITY	Regulate humidity	Regulate humidity	No
<input type="checkbox"/> SYSTEM CONTROL	HVAC Controller	HVAC Controller	Yes
<input type="checkbox"/> TEMPERATURE	Regulate temperature	Regulate temperature	Yes
<input type="checkbox"/> VENTILATION	Provide proper ventilation	Provide proper ventilation	Yes

Propagated functions cannot be modified or removed on child items. Changes to the parent item are not propagated to the child items, however by using **Propagate Definitions** again the propagated child item structure is completely reset to the one of the parent item, functions added on the child item remain in place.

Fault Types

Next level below the function are the fault types that explain how the item can potentially fail to deliver the intended function.



The screenshot shows the 'Function' screen for the 'TEMPERATURE - Regulate temperature' function. On the left, a tree view shows 'ICO - HVAC systems' expanded, with 'FAULT TYPES' selected under 'TEMPERATURE'. Under 'FAULT TYPES', there are five items: '130 - Refrigerant Leak', '140 - Compressor Failure', '150 - Thermostat Malfunction', '160 - Condensate Drainage Issues', and '190 - Frozen Evaporator Coil'. On the right, a table lists these fault types with their severity ranks and effect descriptions. A column labeled 'Propagated' shows values: 'No' for all five fault types. The 'No' values are highlighted with a red border.

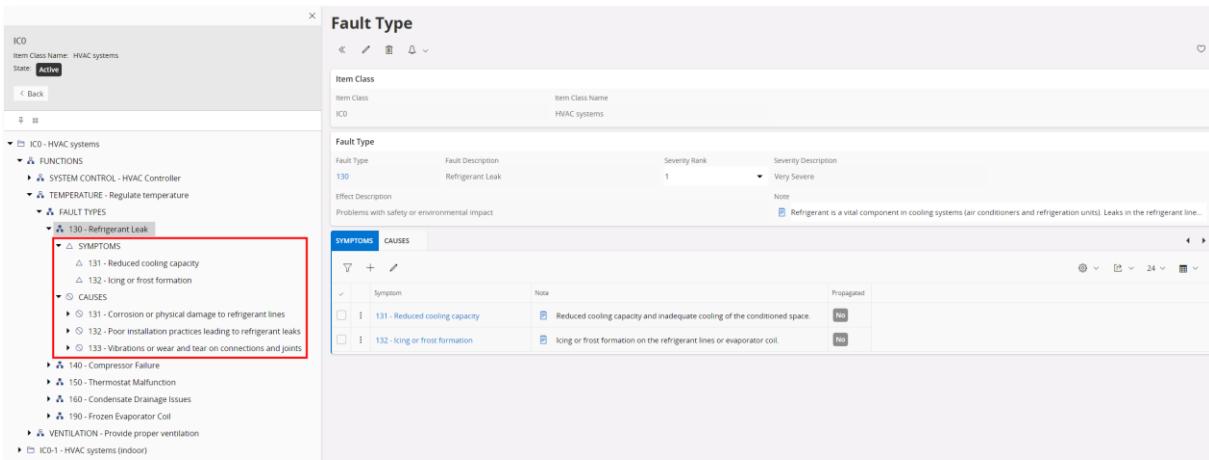
Fault Type	Severity Rank	Effect Description	Note	Propagated
<input type="checkbox"/> 130 - Refrigerant Leak	1 - Very Severe	Problems with safety or environmental impact	<input checked="" type="checkbox"/> Refrigerant is a vital component in cooling systems (air conditioners and refrigeration units).	No
<input type="checkbox"/> 140 - Compressor Failure	2 - Severe	Severe problems with drastic effects in function and performance	<input checked="" type="checkbox"/> The compressor is the heart of an HVAC system's cooling cycle. If it fails, the cooling process stops.	No
<input type="checkbox"/> 150 - Thermostat Malfunction	2 - Severe	Severe problems with drastic effects in function and performance	<input checked="" type="checkbox"/> The thermostat is responsible for sensing the ambient temperature and controlling the heating and cooling system.	No
<input type="checkbox"/> 160 - Condensate Drainage Issues	3 - Medium	Medium problem with reduction in function and performance	<input checked="" type="checkbox"/> HVAC systems produce condensate during the cooling process. If the condensate drain becomes clogged, it can lead to water damage.	No
<input type="checkbox"/> 190 - Frozen Evaporator Coil	2 - Severe	Severe problems with drastic effects in function and performance	<input checked="" type="checkbox"/> If the evaporator coil becomes excessively cold due to issues like poor airflow or low refrigerant levels, it can freeze over.	No

Again, the Propagated flag indicates if the function and fault types were copied from a parent item, additional fault types can be listed on the child item.

For every Fault Type there is a Severity Rank, which is maintained at  [Service Management>Basic Data>Service Work Basic Data>Task Basic Data>Severities](#).

Symptoms and Causes

For every fault type there can be various symptoms (i.e., what the user observes) and causes (the reason for the fault). When using child item classes, it is possible to specify more fault types in addition to the propagated ones.



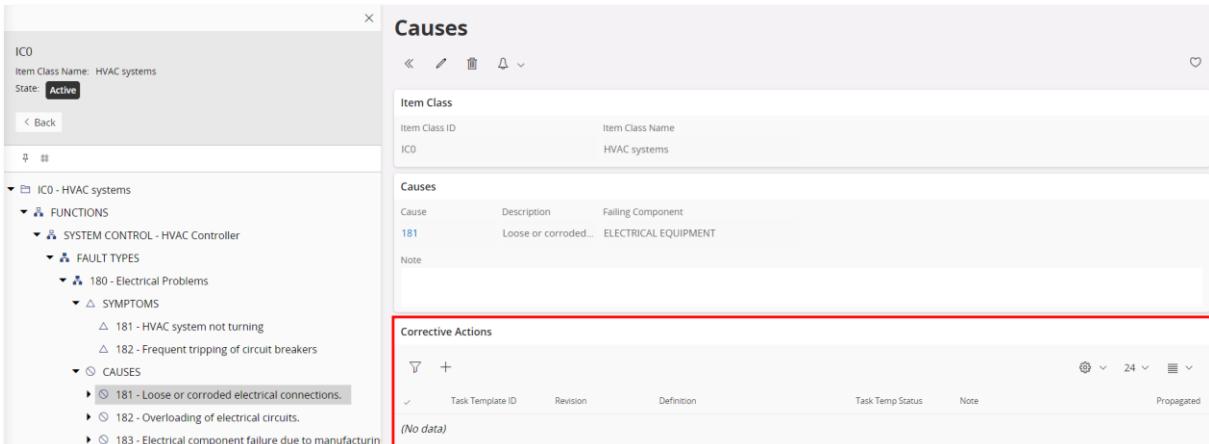
The screenshot shows the IFS Fault Type interface. On the left, a navigation tree lists categories like Item Class Name: HVAC systems, State: Active, and various fault types such as FUNCTIONS, SYSTEM CONTROL - HVAC Controller, TEMPERATURE - Regulate temperature, FAULT TYPES, and 130 - Refrigerant Leak. The 130 - Refrigerant Leak node is expanded, showing SYMPTOMS (131 - Reduced cooling capacity, 132 - Icing or frost formation) and CAUSES (131 - Corrosion or physical damage to refrigerant lines, 132 - Poor installation practices leading to refrigerant leaks, 133 - Vibrations or wear and tear on connections and joints). On the right, a detailed view of the Fault Type '130 - Refrigerant Leak' is shown, including its description (Refrigerant Leak), severity rank (1, Very Severe), and effect description (Problems with safety or environmental impact). Below this, a table lists symptoms and causes, with '131 - Reduced cooling capacity' and '132 - Icing or frost formation' being examples.

Every cause specifies a **Failing Component**, which is just a text field, not a part or object. It's possible to have a number of failing components for a certain cause. Each failing component should be unique within its failure analysis structure. However, it is possible to define similar failing components in different failure analysis structures.

Corrective Actions

Note: Corrective Actions utilize work task templates and hence do not apply to NGSM.

On the Cause tab, use the **Corrective Actions** list to specify work task templates to rectify the issue:



The screenshot shows the IFS Causes interface. On the left, a navigation tree lists categories like Item Class Name: HVAC systems, State: Active, and various causes such as FUNCTIONS, SYSTEM CONTROL - HVAC Controller, FAULT TYPES, and 180 - Electrical Problems. The 180 - Electrical Problems node is expanded, showing SYMPTOMS (181 - HVAC system not turning, 182 - Frequent tripping of circuit breakers) and CAUSES (181 - Loose or corroded electrical connections, 182 - Overloading of electrical circuits, 183 - Electrical component failure due to manufacturing). On the right, a detailed view of the cause '181 - Loose or corroded electrical connections' is shown, including its description (Loose or corroded... ELECTRICAL EQUIPMENT) and note. Below this, a table lists corrective actions, with '(No data)' being the current status.

To be able to associate a corrective action to a cause, the work task template needs to be linked to the item class.

Work Task Template WTT-131 - Replace refrigerant line ▾ 1 of 1 Active

Task Template ID: WTT-131 | Definition: Replace refrigerant line | Revision: 1 | Template Type: 10 - Inspection

Action: 10 - Basic Service

GENERAL PREPARE WORK LIST MAINTENANCE TRIGGERS TASK TEMPLATE USED IN VALID FOR SITES

Job Description			Revision Information								
			Created Reason:	Created By:	Created Date:						
				TISCNL	8/1/23, 5:25 PM						
			Modified By:	Last Modified:	Revision Contr...						
				8/1/2023	No						
Category List											
<table border="1"> <thead> <tr> <th>Category</th> <th>Identity</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Item Class</td> <td>ICO</td> <td>HVAC systems</td> </tr> </tbody> </table>						Category	Identity	Description	Item Class	ICO	HVAC systems
Category	Identity	Description									
Item Class	ICO	HVAC systems									

Once these associations have been established, specifying a symptom on the work order enables the **Select Work Task Templates from Item Class** button that lists the relevant corrective actions.

Prepare Work Order 9 - Repair ▾ 1 of 2 WorkRequest

View ▾ Status ▾ Pre Posting ▾ Pick List ▾ Arrange Tasks ▾ Work Order Address ▾ Service Quotation ▾ Project Connection ▾ Warranty ▾ Print ▾ Document Text ▾

WO No: 9	WO Site: 20 - Ventechi Netherlands	Maint. Org.: 20 - Ventechi Netherlands	Project Connected: No	Quotation Connected: No	Repair Work Order: No
Directive: Repair	Customer No:	In a Structure: No	Has Structure: No	Has Service Contract: No	
Connection Type: EQUIPMENT	Object Site: 10 - Ventechi Sweden	Object: SEVTZ1001 - VENTECHI ...	Has Obsolete Jobs: No	Report Planned Cost: Yes	Part Certification Form: No
Work Type:	Criticality:	Priority:	Price Authorization Required: No	Finish with Task: No	

Planning Schedule

Fault Information

Fault Description: Discovery: Symptom: 111 - Reduced airflow from vents.

Work Description: Job Description

WORK TASKS JOBS AND TEMPLATES PLANNING PERMITS

+ Select Work Task Templates from Item Class

Job ID	Task Template	Site	Revision	Definition	Work Description	Quantity	Status	Pm No	PM Revision	PM Job ID	Service Type	Originating System
(No data)												

Use and Analyze SFM Data

The work task inherits the **Item Class** from the associated object, however it can be overwritten on the task:

[Service > Work Management > Preparation and Planning > Work Task > Object Information](#)

Object Information 1409 - Inspect water outlet and inlet for leaks Inspect fresh air damper Check couplings and belts 1 of 1

Object Information	Reported Connection Type	Reported Object Site	Reported Object
EQUIPMENT	10 - Ventechi Sweden	SEVTZ1001 - VENTECHI Z SERIES UNITS	SEVTZ1001 - VENTECHI Z SERIES UNITS
Actual Connection Type	Actual Object Site	Actual Object	Actual Object
EQUIPMENT	10 - Ventechi Sweden	SEVTZ1001 - VENTECHI Z SERIES UNITS	SEVTZ1001 - VENTECHI Z SERIES UNITS
Maintenance Strategy	Actual Object Has Equipment Classification	Safety and Environmental Critical Element	Item Class
No	No	No	IC0 - HVAC systems
Item Class Source	Test Point ID	Function	Fault Type
EQUIPMENT	131 - Reduced cooling capacity	TEMPERATURE - Regulate temperature	130 - Refrigerant_Leak
Symptom ID	Cause	Failing Component	Operational Status
131 - Reduced cooling capacity	131 - CORROSION OR PHYSICAL DAMAGE TO REFRIGERANT	REFRIGERANT	40 - Operational
Operational Status Type			
NotObstructive			

Once the item class is selected, the user can pick function, fault type, and cause from the tree structure created in the SFM administration. This eases the end user data entry process, avoids mistakes from free entries, and guarantees high-quality root cause analysis data. The same data entry is available on the *Report In* page in IFS Mobile (MWO):

18:05 Tue 1. Aug

Report In 1322 - 1387 Corrective Maintenance

Item Class	IC0 - HVAC systems	Failing Function	VENTILATION - Provide proper ve...
Fault Type	110 - Air Filter Clogging	Cause	111 - Failure to replace or clean ai...
Performed Action	Enter Performed Action	Fault Class	110 - Electrical
Fault Description	Corrective Maintenance		
Work Started	1322 - 1387 Corrective Maintenance		
Location	Rob Slotemakerstraat 2041 JP - Zandvoort NL - NETHERLAND		
Name	Rob Slotemakerstraat 2041 JP - Zandvoort NL - NETHERLAND		
Address	Rob Slotemakerstraat 2041 JP - Zandvoort NL - NETHERLAND		
Task Information	Error Cause Description		
Site	20 - Ventechi Neth		
Discovery	Performed Work	Work Start*	28.07.2023 14:41
Enter Discovery			Receipts
Symptom			Journal
Enter Symptom			
Work Finish*	01.08.2023 12:00	Hours to complete remaining work	
Created Date	Priority		
13.07.2023 15:59	Enter Priority		
			Mobile Integration

Note that the **Fault Class** is independent from the SFM data. It's mainly used in the Business-to-Business (B2B) interface to follow up on errors and costs, which makes it possible to run technical and financial analyses of the costs. Fault Classes are maintained at [Service>Basic Data>B2B Basic Data>B2B Classes](#).

Finally, use the *Structured Failure Management* lobby to analyze the SFM data:

STRUCTURED FAILURE MANAGEMENT

Start=10 | Api Period=DAY1 | Day=SB5 | Period=MONTH1 | Translate

Ventechi

Tina Schreer

120 h

OBJECTS **320** **AGE** **207** **MTTR** **0** **DOWNTIME** **0** **REACTIVE** **100 %** **PL V ACT COST** **0 %** **SUMMARY** **LINKS**

IN STRUCTURE **AVERAGE DAYS** **AVERAGE DAYS** **AVERAGE DAYS** **LAST 365 DAYS** **LAST 365 DAYS**

Object Structure

LEVEL	ID	Object Site	MCH CODE	Description	OBJECTS
1	10	Orebro Wind farm	10-OEB-WF	Orebro Wind farm	1
1	10	Ventechi Z series units	10VZ1050	Ventechi Z series units	1
1	10	Ventechi Z series units	10VZ1050X	Ventechi Z series units	1
1	10	Ventechi Z series units	10VZ1051	Ventechi Z series units	1
1	10	Ventechi Z series units	10VZ1052	Ventechi Z series units	1

FAILURE ANALYSIS TREND BY MONTH LAST 365 DAYS



2023-07

OBJECT DETAILS

LEVEL	ID	DESCRIPTION	AGE	MTTR	D/T	WT
1	10-OEB-WF	Orebro Wind farm	0	0	0	0
2	10-EQUIP	Equipment	0	0	0	0
3	10-ZT	Refrigeration	0	0	0	0
4	10-FD-RAGE-RA-2500-00	Ford Ranger Raptor Pick up 2500kg	0	0	0	0
4	10-FD-RAGE-RA-2500-00	Ford Ranger Raptor Pick up 2500kg	0	0	0	0

ITEM CLASS

ID	OBJECTS
IC8 - Diffusers	8
IC0 - HVAC systems	311
N/A	311

Criticality

ID	OBJECTS
1 - Urgent (C1)	1
2 - Medium (C3)	48
2 - High (C2)	47
N/A	106

FAULT CLASS

ID	TASKS
N/A	2

FAULT TYPE

ID	TASKS
200 - Damaged Fan Blades	1
10 - Mechanical Fault	1

TYPE

ID	OBJECTS
30 - Single room ventilation systems	102
40 - Air handling units	5
40-06 - Industrial Ducts	4
90-03 - Heat pumps	2
90-01 - Cool water pumps	1

CATEGORY

ID	OBJECTS
01 - Mechanical	105
05 - Hydraulical	1
02 - Electrical	1
N/A	213

CAUSE

ID	TASKS
203 - Fan imbalance leading to vibration and stress.	1
10 - External Conditions	1

PERFORMED ACTION

ID	TASKS
N/A	2

Note: The Structured Failure Management lobby only considers work orders/work tasks, not requests/ request tasks.

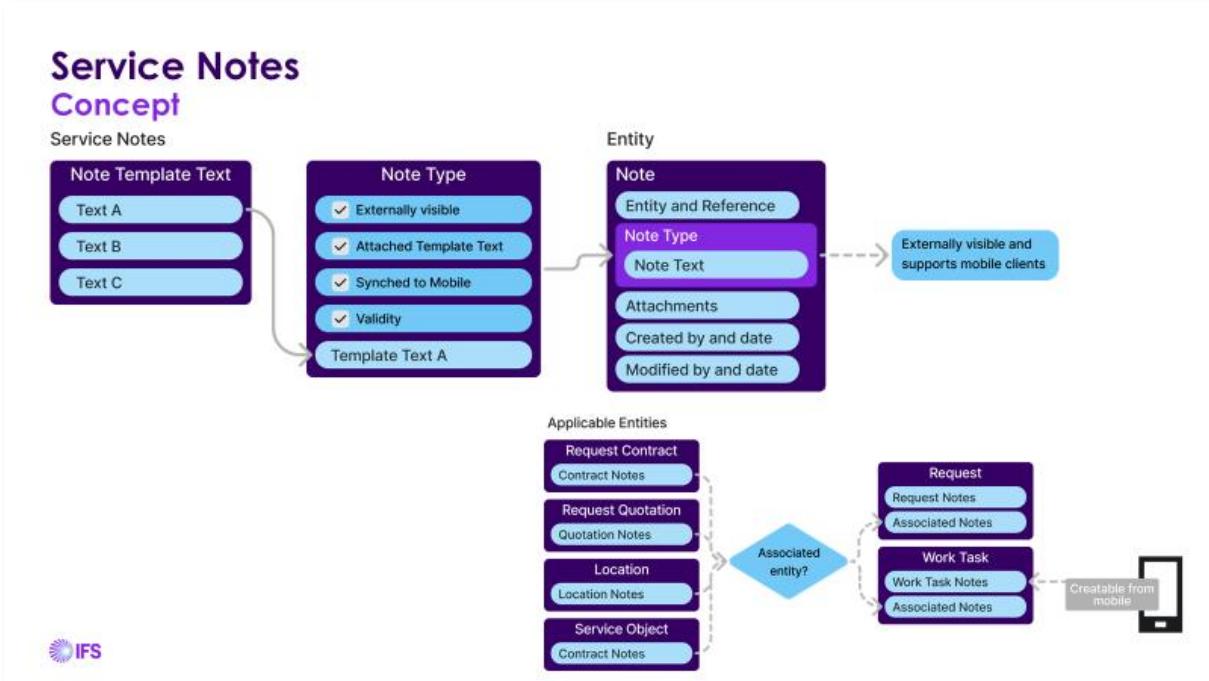
Known Limitations

Corrective actions can only specify work task templates i.e., it is only possible to create work orders, not Request. Filtering task templates is only supported in PM programs and work orders, not in recurring services and requests.

The Structured Failure Management lobby only considers work orders/work tasks, not requests/ request tasks.

Service Notes

Service Notes are important in the Request Management process to keep track of interactions between departments and between service provider and customer. In previous releases contact notes on Request provided this ability to a certain extent, but the introduction of service notes (replacing contact notes) provides enhanced support to cater interaction throughout the Request Process, including Request Work Tasks, Mobile as well as supporting entities such as Request Quotations, Locations and Contracts.



Template Definition (25R1)

 Service Management>Basic Data>General Basic Data>Service Note>Note Template Texts

The *Applicable For* tab allows the administrator to make templates only available for individual Service Organizations or Service Delivery Units. The **Has Applicability** flag clearly shows whether this capability is used by a specific template.

[Service Management > Basic Data > General Basic Data > Service Note > Note Template Texts](#)

Note Template Texts

Search

Note Template Texts				Has Applicability	Validity																																				
ID	Description	Template Text Block																																							
10	Access information	To enter the property, please call the main contact on the request.	<input checked="" type="checkbox"/>	Yes	Active																																				
APPLICABLE FOR																																									
<table border="1"> <thead> <tr> <th colspan="2">Service Organization</th> <th colspan="4">Service Delivery Unit</th> </tr> <tr> <th colspan="2">2501 - Ventechi Netherlands</th> <th colspan="4"></th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/></td> <td>15</td> <td>Appointment booked</td> <td colspan="2">Appointment booked</td> <td>No Active</td> </tr> <tr> <td><input type="checkbox"/></td> <td>20</td> <td>Dog</td> <td colspan="2">Customer has a raging dog. Be aware!</td> <td>No Active</td> </tr> <tr> <td><input type="checkbox"/></td> <td>30</td> <td>No answer 1</td> <td colspan="2">No answer - 1st try</td> <td>No Active</td> </tr> <tr> <td><input type="checkbox"/></td> <td>35</td> <td>No answer 2</td> <td colspan="2">No answer - 2nd try</td> <td>No Active</td> </tr> </tbody> </table>						Service Organization		Service Delivery Unit				2501 - Ventechi Netherlands						<input type="checkbox"/>	15	Appointment booked	Appointment booked		No Active	<input type="checkbox"/>	20	Dog	Customer has a raging dog. Be aware!		No Active	<input type="checkbox"/>	30	No answer 1	No answer - 1st try		No Active	<input type="checkbox"/>	35	No answer 2	No answer - 2nd try		No Active
Service Organization		Service Delivery Unit																																							
2501 - Ventechi Netherlands																																									
<input type="checkbox"/>	15	Appointment booked	Appointment booked		No Active																																				
<input type="checkbox"/>	20	Dog	Customer has a raging dog. Be aware!		No Active																																				
<input type="checkbox"/>	30	No answer 1	No answer - 1st try		No Active																																				
<input type="checkbox"/>	35	No answer 2	No answer - 2nd try		No Active																																				

Service Management>Basic Data>General Basic Data>Service Note>Note Types

[Service Management > Basic Data > General Basic Data > Service Note > Note Types](#)

Note Types

Search

Note Types				Attached Templates	Synced to Mobile	Editable	Validity																																
Note Type ID	Note Type Description	Has Applicability	Visibility																																				
10	Access information	<input type="checkbox"/>	No	External	Yes	Yes	No Active																																
NOTE TEMPLATES APPLICABLE FOR																																							
<table border="1"> <thead> <tr> <th colspan="2">Note Template ID</th> <th colspan="6">Template Text Block</th> </tr> <tr> <th colspan="2">10</th> <th colspan="6">Access information</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/></td> <td>20</td> <td>Customer contacted</td> <td>No</td> <td>External</td> <td>No</td> <td>Yes</td> <td>No Active</td> </tr> <tr> <td><input type="checkbox"/></td> <td>30</td> <td>Contract notes</td> <td>No</td> <td>Internal Only</td> <td>No</td> <td>Yes</td> <td>No Active</td> </tr> </tbody> </table>								Note Template ID		Template Text Block						10		Access information						<input type="checkbox"/>	20	Customer contacted	No	External	No	Yes	No Active	<input type="checkbox"/>	30	Contract notes	No	Internal Only	No	Yes	No Active
Note Template ID		Template Text Block																																					
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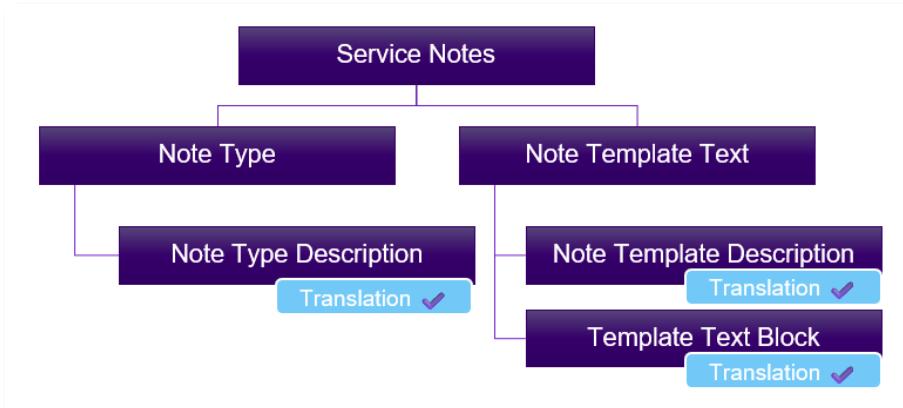
Visibility is used to specify whether notes for this particular Note Type are created for internal use or should be externally visible (there is currently no functionality to display notes in any external portals, however this flag can be utilized when creating custom portals). **Synced To Mobile** controls whether the note type should be synchronized and available to use in MWO. **Editable** controls whether or not a user is allowed to change the visibility, mobile sync and the Template Text when the note type is associated with a service note.

The *Applicable For* tab allows the administrator to make Note Types only available for individual Service Organizations or Service Delivery Units.

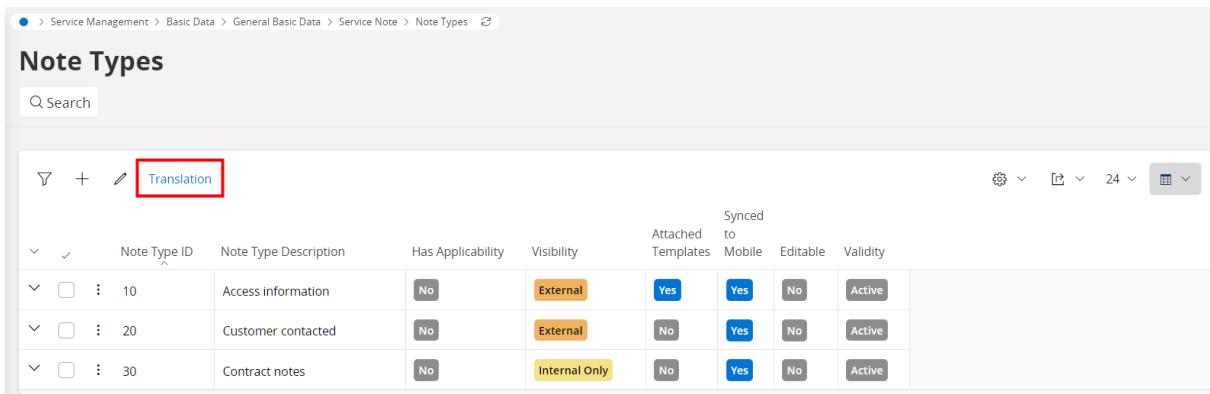
Service Note Template Translation (25R1★)

Global businesses need clear communication for efficient service. Translating service notes into multiple languages helps technicians and users access information in their preferred language,

improving clarity and reducing miscommunication. Multilingual support makes service details accessible, enhancing operations and the service experience across regions.



📁 Service Management>Basic Data>General Basic Data>Service Note>Note Types



Note Type ID	Note Type Description	Has Applicability	Visibility	Attached Templates	Synced to Mobile	Editable	Validity
10	Access information	No	External	Yes	Yes	No	Active
20	Customer contacted	No	External	No	Yes	No	Active
30	Contract notes	No	Internal Only	No	Yes	No	Active

The **Translation** command opens the standard **Basic Data Translation** page, pre-filtered to the relevant content. Use this page to create translations.

My Administration > Basic Data Translation

Basic Data Translation

Search ()

Sort by ▾ REQMGMT - NoteType ▾ 1 of 1

Logical Unit: NoteType

Copy Installation Text to Text for chosen Module and Logical Unit

Basic Data Translation

Module: REQMGMT Logical Unit: NoteType Use Translation Show Prog Language

Translations

Attribute Key	Language Code	Text	Installation Text	System Defined
10	PROG	Access information	Access information	No
10	en	Access information	Access information	No
20	PROG	Customer contacted	Customer contacted	No
20	de	Kunde kontaktiert	Customer contacted	No
20	en	Customer contacted	Customer contacted	No
30	PROG	Contract notes	Contract notes	No
30	en	Contract notes	Contract notes	No

Use the same approach for Note Template Texts, which are maintained at **Service Management> Basic Data>General Basic Data>Service Note>Note Template Texts.**

Service Management > Basic Data > General Basic Data > Service Note > Note Template Texts

Note Template Texts

Search ()

Translation

Note Template ID	Note Template Description	Template Text Block	Has Applicability	Validity
10	Access information	To enter the property, please call the main contact on the request.	No	Active
15	Appointment booked	Appointment booked	No	Active
20	Dog	Customer has a raging dog. Be aware!	No	Active
30	No answer 1	No answer - 1st try	No	Active
35	No answer 2	No answer - 2nd try	No	Active

For each Note Template ID there are xxx-DESCRIPTION and xxx-NOTE_TEXT attributes that can be translated.

My Administration > Basic Data Translation

Basic Data Translation

Search (1)

Sort by ▾

REQMGT
Logical Unit: NoteTemplateText

« REQMGT - NoteTemplateText ▾ 1 of 1

Copy Installation Text to Text for chosen Module and Logical Unit

Basic Data Translation

Module	Logical Unit	Use Translation	Show Prog Language
REQMGT	NoteTemplateText	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Translations

	Attribute Key	Language Code	Text	Installation Text	System Defined
<input type="checkbox"/>	10~DESCRIPTION	PROG	Access information	Access information	<input type="checkbox"/> No
<input type="checkbox"/>	10~NOTE_TEXT	PROG	To enter the property, please call the ma...	To enter the property, please call the ...	<input type="checkbox"/> No
<input type="checkbox"/>	15~DESCRIPTION	PROG	Appointment booked	Appointment booked	<input type="checkbox"/> No
<input type="checkbox"/>	15~NOTE_TEXT	PROG	Appointment booked	Appointment booked	<input type="checkbox"/> No

Service Notes in Web Client

A service note can be typed manually or added using a Template Text in the New Service Note assistant, which is available on the *Service Notes* tab of these pages:

- Location
- Request Quotation
- Request Contract
- Service Object
- Request
- Request Work Task

New Service Note

Note Type	Template Text	Reference
10 - Access Information	20 - Access Information - Reception	Work Task - 9
Visibility	Sync to Mobile	
External	<input checked="" type="checkbox"/>	

Notes

To enter the property, please proceed to the reception (ground floor).

Drop files to attach, or Add File...

OK Cancel

For Service Notes in Requests and Work Tasks it is possible to also view notes created for related entities i.e., the Request Contract, Object or Location using **Show Associated Notes**.

Request Work Task 9 - Remote Diagnostics ▾ 1 of 1

Work Started

Task Details

Task No	Description	Invoicing Info
9	Remote Diagnostics	EUR
Created Date	Long Description	Request
10/30/23, 1:32 PM	Remote Diagnostics	✉ 13 - Repair
Scope	Customer	
19	NL20103 - Van Buren Hotel Amsterdam...	

Location and Address

Location	683
Address	Joan Muyskenweg 20 1096 CJ - Amsterdam NL

Item Details

Task Attributes

Planning and Scheduling

ASSIGNMENTS RESOURCES STEPS MATERIAL RETURNS SLA TIME REPORTS PLANNED COST AND SALES COSTS SALES SERVICE NOTES SIGN OFF REQUIREMENTS

New Note

Show Associated Notes Apply Reset Clear Settings

Notes	Note type	Visibility	Created By	Created Date	Modified Date	Entry	Synced To Mobile
To enter the property, please proceed to the reception (ground floor).	10 - Access information	External	TISCNL	11/6/23, 1:28 PM		Work Task	Yes
Location-specific note: Badge is required throughout the entire area.		External	TISCNL	11/6/23, 1:31 PM		Location	Yes

Service Notes in MWO

Note: MWO only supports Service Notes for Request Management, not for Work Order Management.

Notes are available for Request Work Tasks and can be viewed through the actions on the Work Task page. It is possible to view notes connected to the Work Task and its associated entities:

- Request Task Location
- Request Task Object
- Request Task Contract Line
- Request

Notes are also available on the *Request Quotation* page where quotation-related service notes can be viewed.

A technician can view the note list and also navigate to the *Note Details* page to view the complete note.

17:45 Wed 16. Oct

Notes

1 - 428 Corrective Maintenance

Task Notes (1)

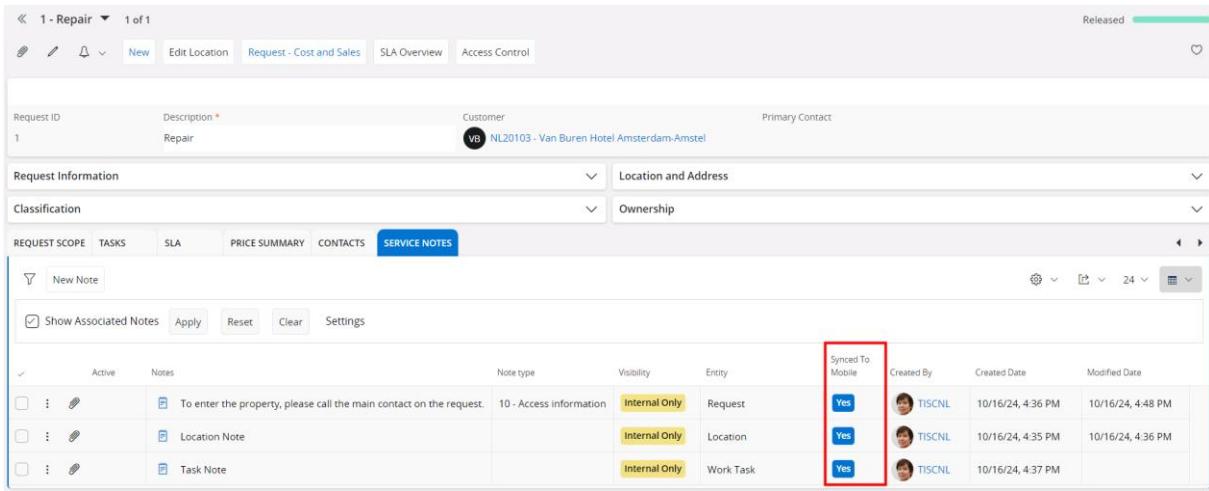
Location Notes (1)

Object Notes (1)

Contract Notes (0)

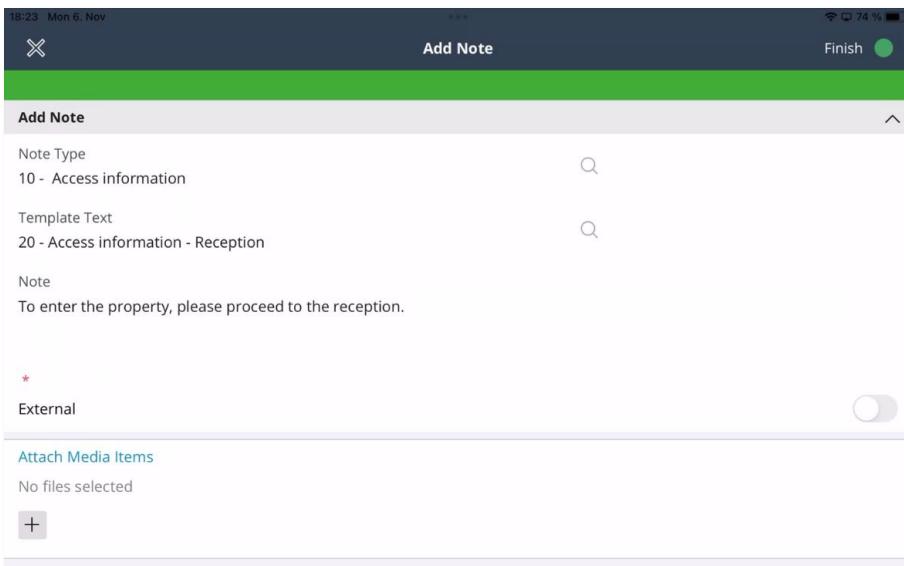
Request Notes (1)

Only the notes that are flagged as **Synced to Mobile** can be viewed in MWO.



Active	Notes	Note type	Visibility	Entity	Synced To Mobile	Created By	Created Date	Modified Date
<input type="checkbox"/>	<input type="checkbox"/> To enter the property, please call the main contact on the request.	10 - Access information	Internal Only	Request	<input checked="" type="checkbox"/> Yes	TISCNL	10/16/24, 4:36 PM	10/16/24, 4:48 PM
<input type="checkbox"/>	<input type="checkbox"/> Location Note		Internal Only	Location	<input checked="" type="checkbox"/> Yes	TISCNL	10/16/24, 4:35 PM	10/16/24, 4:36 PM
<input type="checkbox"/>	<input type="checkbox"/> Task Note		Internal Only	Work Task	<input checked="" type="checkbox"/> Yes	TISCNL	10/16/24, 4:37 PM	

It is possible to create Notes from Work Tasks and Request Quotations (not from task-associated entities). When creating Notes, only Note Types that are flagged as **Synced to Mobile** can be used. The default text for a Note Type is populated, however can be changed. If the Note Type is flagged as **Editable**, the user can alter the Note. If the selected template doesn't have a Note defined, the user can still add the note even if the Note Type is flagged as not editable. It is possible to add free notes without using a Note Type and Template. Finally, it is possible to add images/videos to the note.



18:23 Mon 6. Nov

Add Note

Finish

Add Note

Note Type
10 - Access information

Template Text
20 - Access information - Reception

Note
To enter the property, please proceed to the reception.

* External

Attach Media Items
No files selected

+

Note: MWO users can modify any note, but only delete the notes that they have created themselves.

Event Management

Concept

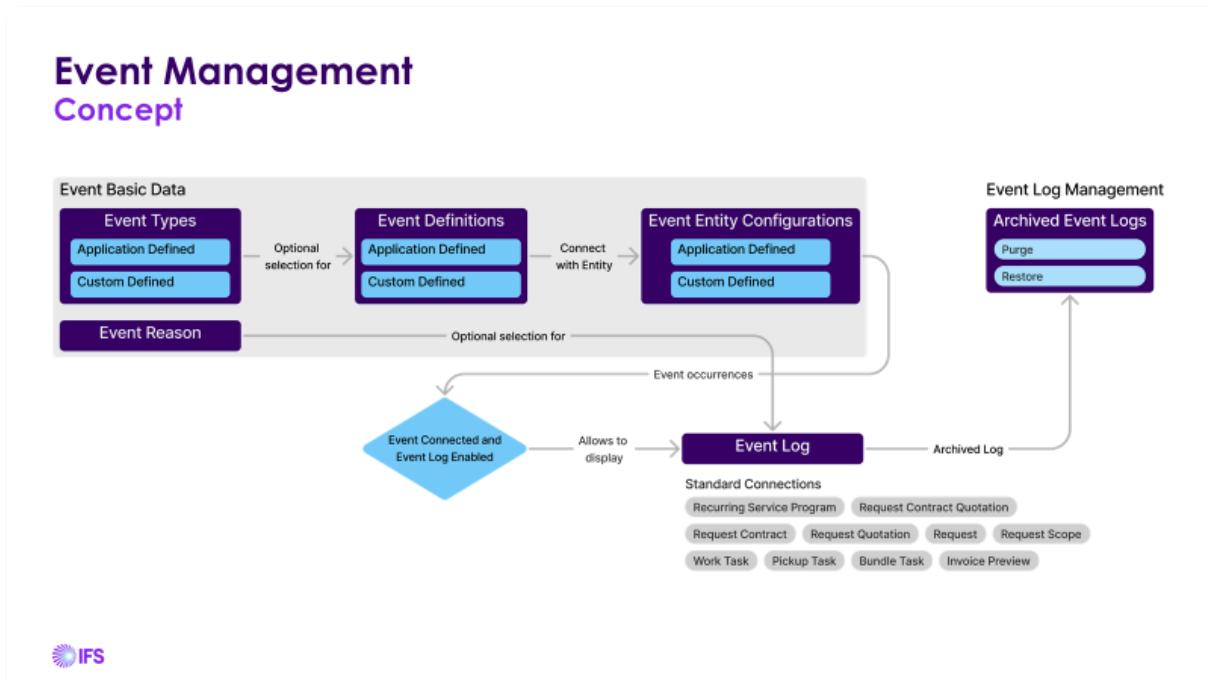
Keeping an event log/audit trail for different entities is a common requirement, both to allow for investigations into missed SLAs, unsatisfied customers or other problems that may occur, but also sometimes for auditing or legal reasons.

The introduction of event logs is driven through updates that are made to various service-related records such as Request Contracts, Requests, Quotations, Invoice Previews and Work Tasks. It is also possible to configure events for any entity to meet specific needs for logging.

The Event Log holds all the create and status change operations that were performed on supported entities, including details such as the information that was changed, the user who performed the updates, and the time of each update.

Event Management provides:

- A chronological and detailed trail of actions and transactions, details about the individuals involved, the timing of events, and the actions behind them.
- Ability to configure BPA rules to automatically generate additional event records tailored to specific needs.
- Ability to archive event logs helps to comply with industry regulations and standards while managing data lifecycle effectively by segregating active and frequently accessed data from less frequently accessed/inactive data.
- Ability to purge archived event logs that are no longer needed, expired, or deemed irrelevant in order to free up storage space, maintain data integrity, and comply with data retention policies or regulatory requirements.

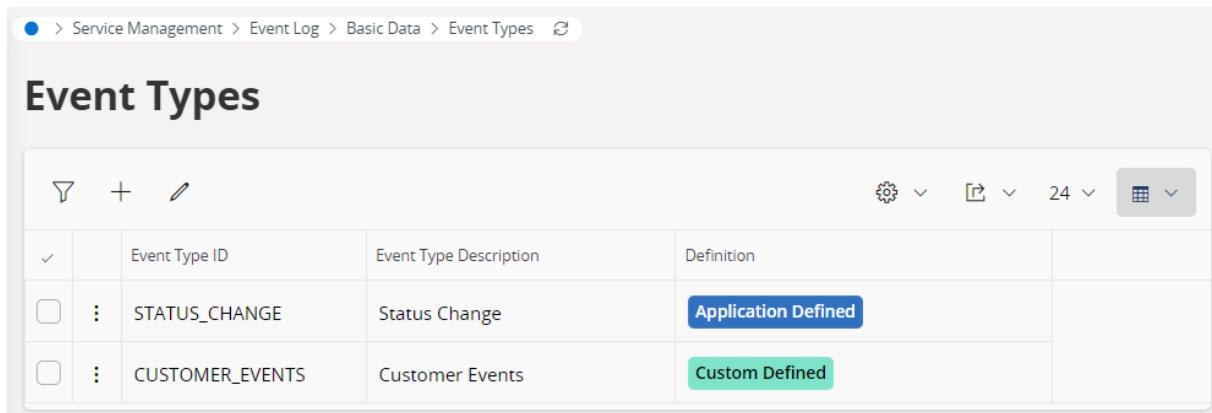


Events Setup

Event Types

 Service Management>Basic Data>General Basic Data>Event Log>Event Type

Event Types are an optional way to group events. There are a number **Application Defined** Event Types delivered as standard (e.g., Status Change), it is also possible to create **Custom Defined** Event Types.

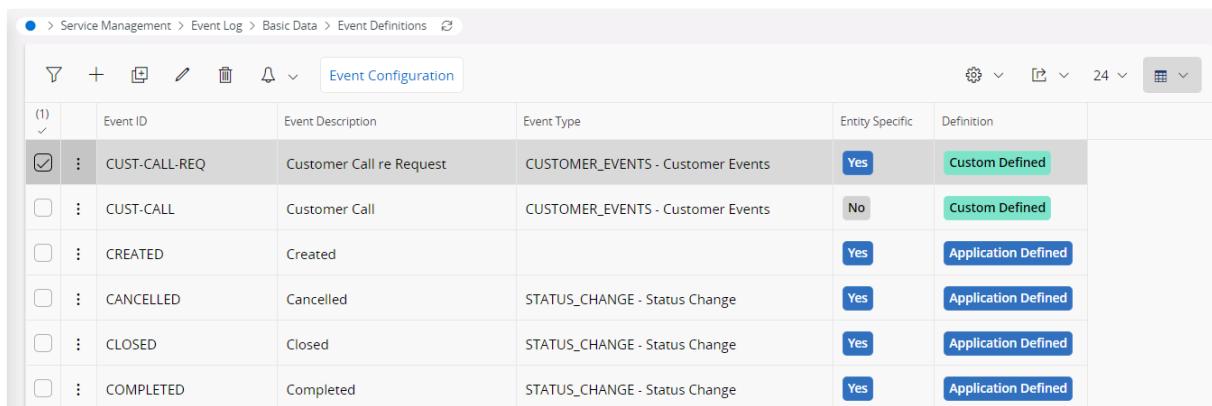


	Event Type ID	Event Type Description	Definition
<input type="checkbox"/>	STATUS_CHANGE	Status Change	Application Defined
<input type="checkbox"/>	CUSTOMER_EVENTS	Customer Events	Custom Defined

Event Definitions

 Service Management>Basic Data>General Basic Data>Event Log>Event Definitions

Event Definitions specify specific occurrences, actions, or transactions.



(1)	Event ID	Event Description	Event Type	Entity Specific	Definition
<input checked="" type="checkbox"/>	CUST-CALL-REQ	Customer Call re Request	CUSTOMER_EVENTS - Customer Events	Yes	Custom Defined
<input type="checkbox"/>	CUST-CALL	Customer Call	CUSTOMER_EVENTS - Customer Events	No	Custom Defined
<input type="checkbox"/>	CREATED	Created		Yes	Application Defined
<input type="checkbox"/>	CANCELLED	Cancelled	STATUS_CHANGE - Status Change	Yes	Application Defined
<input type="checkbox"/>	CLOSED	Closed	STATUS_CHANGE - Status Change	Yes	Application Defined
<input type="checkbox"/>	COMPLETED	Completed	STATUS_CHANGE - Status Change	Yes	Application Defined

Entity Specific indicates whether this event can be configured for one or more specific entities (e.g., JtTask - Work Task) or whether it applies to all entities. With Entity Specific=Yes, specify the entity it applies to in the [Event Entity Configurations](#). With Entity Specific=No, an Event Entity Configuration record will automatically be created with the entity value of * and the event will be available for use and applicable to all entities.

Application-defined Events also support the SLA events Pause, Restart and Extend:

Event Definitions

	Event ID	Event Description	Event Type	Entity Specific	Definition
<input type="checkbox"/>	EXTEND_SLA	Extend Sla		Yes	Application Defined
<input type="checkbox"/>	PAUSE_SLA	Pause Sla		Yes	Application Defined
<input type="checkbox"/>	RESTART_SLA	Restart Sla		Yes	Application Defined

Event Entity Configurations

 Service Management>Basic Data>General Basic Data>Event Log>Event Entity Configurations

The Event Entity Configuration controls what is recorded in the Event Log. Several **Application Defined** Event Entity Configurations are delivered to cover common scenarios, and custom configurations can be defined for any additional scenarios required.

Events will only be captured in the event log if **Event Enabled=Yes**, both Application Defined and Custom Defined events can be disabled.

	Entity	Event	Event Definition	Event Type	SLA Applicable	User Selectable	Event Enabled	Definition
<input type="checkbox"/>	*	CUST-CALL	Custom Defined	CUSTOMER_EVENTS - Customer Events	No	Yes	Yes	Custom Defined
<input type="checkbox"/>	SrvRequest - Srv Request	CUST-CALL-REQ - Customer Call re Request	Custom Defined	CUSTOMER_EVENTS - Customer Events	No	Yes	Yes	Custom Defined
<input type="checkbox"/>	JtTask - Work Task	CUSTREVIEW - Customer Review	Custom Defined	CUSTOMER_EVENTS - Customer Events	No	Yes	Yes	Custom Defined
<input type="checkbox"/>	JtExecutionInstance - Work Assignment	ACCEPTED - Accepted	Application Defined	STATUS_CHANGE - Status Change	No	No	Yes	Application Defined
<input type="checkbox"/>	RequestQuotation - Request Quotation	ACCEPTED - Accepted	Application Defined	STATUS_CHANGE - Status Change	No	No	Yes	Application Defined
<input type="checkbox"/>	RecurringServiceProgram - Recurring Service Pr	ACTIVE - Active	Application Defined	STATUS_CHANGE - Status Change	No	No	Yes	Application Defined

SLA Applicable is only relevant if you are using the SLA solution for Request Management. When this flag is enabled, it is possible to use the event as a trigger to both start an SLA and fulfill an SLA. Please note that to use this for SLAs, the event entity configuration must be enabled as well.

User Selectable controls which events are selectable when a user manually creates an event.

Application-defined Event Entity Configurations also support the SLA events Pause, Restart and Extend:

Event Entity Configurations

	Entity	Event	Event Definition	Event Type	SLA Applicable	User Selectable	Event Enabled	Definition
□	JtTask - Work Task	EXTEND_SLA - Extend Sla	Application Defined		No	No	Yes	Application Defined
□	JtTask - Work Task	PAUSE_SLA - Pause Sla	Application Defined		No	No	Yes	Application Defined
□	JtTask - Work Task	RESTART_SLA - Restart Sla	Application Defined		No	No	Yes	Application Defined
□	SlaCommitment - Sla Commitment	EXTEND_SLA - Extend Sla	Application Defined		No	No	Yes	Application Defined
□	SlaCommitment - Sla Commitment	PAUSE_SLA - Pause Sla	Application Defined		No	No	Yes	Application Defined
□	SlaCommitment - Sla Commitment	RESTART_SLA - Restart Sla	Application Defined		No	No	Yes	Application Defined
□	SrvRequest - Srv Request	EXTEND_SLA - Extend Sla	Application Defined		No	No	Yes	Application Defined
□	SrvRequest - Srv Request	PAUSE_SLA - Pause Sla	Application Defined		No	No	Yes	Application Defined
□	SrvRequest - Srv Request	RESTART_SLA - Restart Sla	Application Defined		No	No	Yes	Application Defined
□	SrvRequestScope - Srv Request Scope	EXTEND_SLA - Extend Sla	Application Defined		No	No	Yes	Application Defined
□	SrvRequestScope - Srv Request Scope	PAUSE_SLA - Pause Sla	Application Defined		No	No	Yes	Application Defined
□	SrvRequestScope - Srv Request Scope	RESTART_SLA - Restart Sla	Application Defined		No	No	Yes	Application Defined

Event Reasons

📁 Service Management>Basic Data>General Basic Data>Event Log>Event Reason

Event Reasons are an optional way to provide further information about why a specific event log was created.

Event Reason

	Event Reason ID	Event Reason Description	Validity
□	SERVICE CUTOFF	End off service support	Active
□	SERVICE COMPLETION	End of service requested	Active
□	INVOICE ISSUANCE	Invoice issued and sent	Active
□	PAYMENT FAILURE	Payment is declined or fails	Blocked
□	COMPLAINT	Customer Complaint	Active
□	SYSTEMOUT	System Outage	Active
□	CREDITLIMIT	Credit Limit Exceeded	Active
□	NOTREACHABLE	Not reachable	Active

Event Handling

The Event Log is accessed through the attachment panel and is enabled by adding the Service EventLog in Object Connections.

The screenshot shows the IFS Cloud Request Management interface. At the top, it displays a navigation path: Service Management > Request Management > Request Handling > Request Details. The main title is "Request 100 - Measurement test for EXT-3...". On the right, there's a status bar showing "Released". Below the title, there are sections for "Request Information" and "Classification". Under "REQUEST SCOPE", there's a table with columns like Service, Scope Status, Connection Type, etc. In the "Attachments" section, there are tabs for DOCUMENTS, MEDIA, and EVENTS (which is highlighted with a red box). The "EVENTS" tab shows a list of events with columns: Event, Event Description, Event Type Description, Source, Created Date, Created By, Note, Key Ref, Event Text, and Event Reason. The list includes entries like "CREATED", "NEW", "RELEASED", and "MOBILE_EVENT".

Add Event allows the user to manually create an event. Events are listed if:

- User Selectable=Yes
- Entity Specific=No or
- Entity Specific=Yes and Event was specified for the current entity (in this case Request)

The screenshot shows the "Add Event" dialog box. It has fields for "Event" (with a dropdown menu), "Event Type" (dropdown), "Event Reason" (dropdown), and "Note" (text area). A search bar at the bottom left says "Find" and has dropdowns for "CUST-CALL (Event ID)" and "Custom Defined (Event Definition)". Buttons for "Cancel" and "OK" are at the bottom.

By default, the Event Log is enabled on Request, Request Scope, Work Task, Work Assignment, Pickup Task, Bundle Task, Request Quotation, Request Contract Quotation, Recurring Service Program, Request Contract and Invoice Preview.

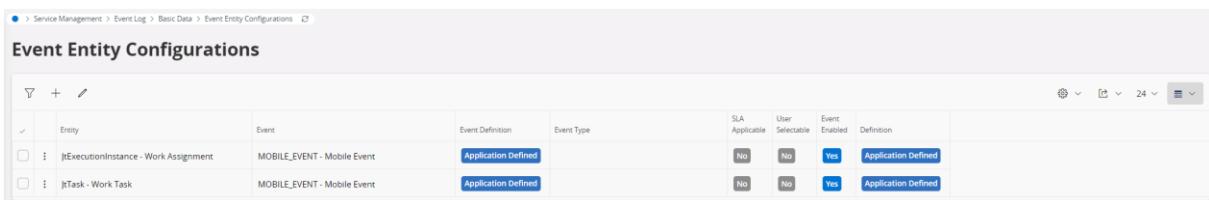
In the Event Log, **Application Defined** Events will be created automatically whereas **Custom Defined** Event will have to be added manually or through configuration.

As the Event Log serves as an Object Connection Service, it's possible to establish Object Connection Transformation (OCT) rules.

Event Handling in MWO

The event **MOBILE_EVENT** is an Application Defined Event that is used to log mobile-specific events for Work Tasks and Work Assignments. The events captured are:

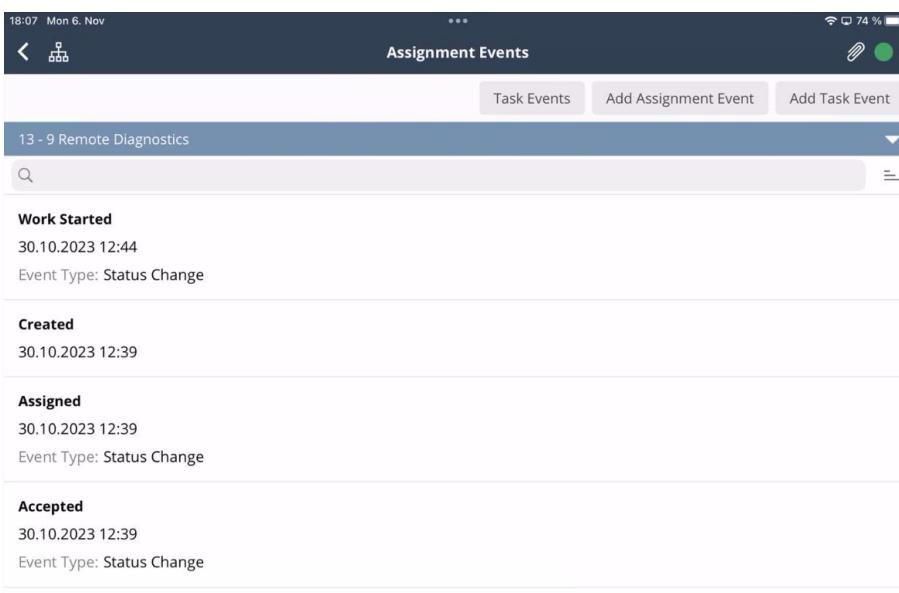
- Task downloaded to MWO
- Travel Paused and Restarted
- Work Paused and Restarted



Entity	Event	Event Definition	Event Type	SLA Applicable	User Selectable	Event Enabled	Definition
JtExecutionInstance - Work Assignment	MOBILE_EVENT - Mobile Event	Application Defined		No	No	Yes	Application Defined
JtTask - Work Task	MOBILE_EVENT - Mobile Event	Application Defined		No	No	Yes	Application Defined

The event log shows all the create and status change operations that were performed on work task and assignment. It is possible to create new events in MWO.

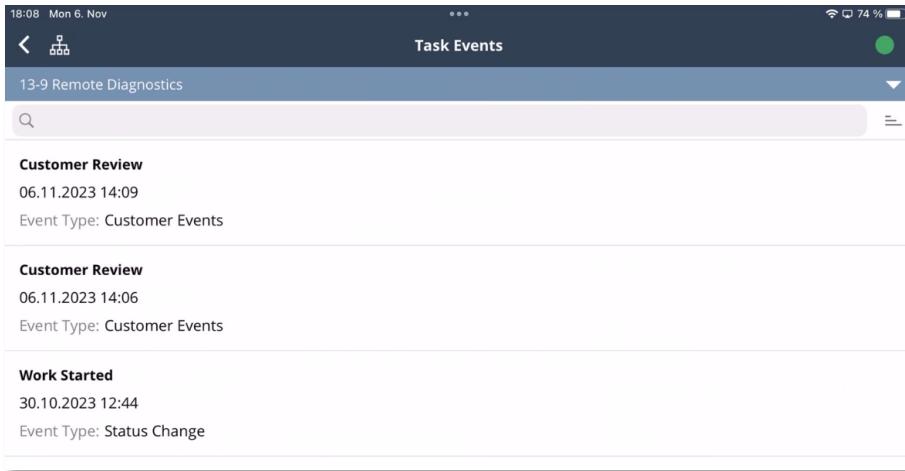
Assignment events are available from the work assignment.



The screenshot shows a mobile application interface titled "Assignment Events". The top bar includes the date and time (18:07 Mon 6. Nov), signal strength, battery level (74%), and a navigation arrow. Below the title are three buttons: "Task Events", "Add Assignment Event", and "Add Task Event". The main area displays a list of events under the heading "13 - 9 Remote Diagnostics". The events are listed as follows:

- Work Started**: 30.10.2023 12:44, Event Type: Status Change
- Created**: 30.10.2023 12:39
- Assigned**: 30.10.2023 12:39, Event Type: Status Change
- Accepted**: 30.10.2023 12:39, Event Type: Status Change

From here it's possible to navigate to **Task Events** or add a new Task or Assignment Event.



Note: Only assignment events are synced, task events are online-only.

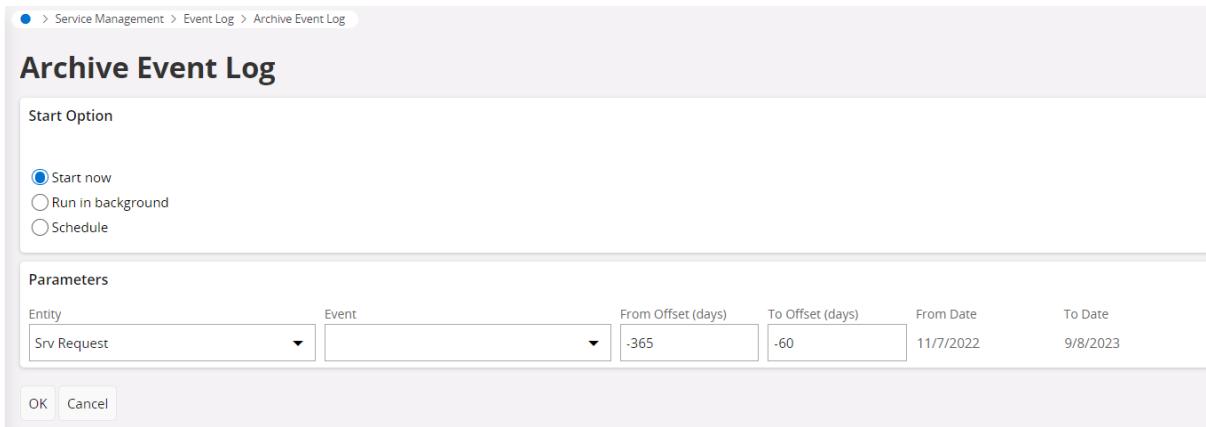
The Events feature is configurable through Workflow Configuration actions for configuration type **Work Task** and **Configured Work Task**. The feature is enabled by default.

Events Archiving and Purging

Archive Event Log

 *Service Management>Basic Data>General Basic Data>Event Log>Archive Event Log*

The Archive Event Log stores event records that are no longer required for operations. The event log records can be archived using a scheduled task, background job or a one-time action.



Records to be archived can be limited to a certain **Entity** and/or **Event**. **From Offset (days)** and **To Offset (days)** (calculated from today) are used to specify from which time frame events should be archived. **To** is mandatory, if **From** is left blank, all records until the To Date will be archived.

The archived records will be moved to a non-transactional table ( *Service Management>Basic Data>General Basic Data>Event Log>Archived Event Logs*) and can be kept in the application for reporting and investigation purposes (e.g., regulatory reasons) until they are purged. Archived records can only be accessed from the Event Log Archive.

Event Log Archive

	Event Log Sequence	Entity	Key Ref	Event	Event Description	Event Type	Event Reason	Created Date	Created By	Note
<input checked="" type="checkbox"/>	236	Work Task Step	TASK_SEQ=15^TASK_STEP_SEQ=58^	CREATED	Created			10/30/23, 3:40 PM	TISCNL	
<input checked="" type="checkbox"/>	237	Srv Request Scope	SRV_REQUEST_SCOPE_ID=24^	RELEASED	Released	STATUS_CHANGE - Status Change		10/30/23, 3:40 PM	TISCNL	
<input checked="" type="checkbox"/>	238	Work Task	TASK_SEQ=15^	RELEASED	Released	STATUS_CHANGE - Status Change		10/30/23, 3:40 PM	TISCNL	
<input type="checkbox"/>	239	Work Assignment	EXECUTION_INSTANCE_SEQ=1^TASK_SEQ=15^	CREATED	Created			10/30/23, 3:41 PM	TISCNL	
<input type="checkbox"/>	240	Work Assignment	EXECUTION_INSTANCE_SEQ=1^TASK_SEQ=15^	ASSIGNED	Assigned	STATUS_CHANGE - Status Change		10/30/23, 3:41 PM	TISCNL	
<input type="checkbox"/>	245	Work Assignment	EXECUTION_INSTANCE_SEQ=1^TASK_SEQ=15^	COMPLETED	Completed	STATUS_CHANGE - Status Change		10/30/23, 3:44 PM	ALTONL	
<input type="checkbox"/>	33	Srv Request	REQ_ID=12^	CREATED	Created			10/26/23, 10:31 AM	TISCNL	

Restore Event Log

Restore is used to restore previously archived event log records. When restored, the archived event log data will be moved back to the active event log table. Using this action is recommended for low volumes as the action is executed online.

When restoring larger amounts of event log records in bulk, use  **Service Management>Event Log>Restore Archived Event** as this will process will be run as a background job.

Service Management > Event Log > Restore Archived Event Log

Restore Archived Event Log

Restore Archived Event Log process will be run as a background job. You will find the status of the job in the Background Jobs page.

Parameters			
Entity	Event	From Offset (days)	To Offset (days)
<input type="button" value="▼"/>	<input type="button" value="▼"/>	-7	0
From Date 10/31/2023	To Date 11/7/2023		
<input type="button" value="OK"/> <input type="button" value="Cancel"/>			

From Date and **To Date** refer to when the event log records where archived, not when they were created. In the example above, event logs **created** in the last 7 days are restored.

Purge Event Log

 **Service Management>Basic Data>General Basic Data>Event Log>Purge Event Log**

Purge Event Log permanently deletes archived event log records. Archive entries can be purged using a scheduled task, background job or a one-time action.

Purge Event Log

Start Option

- Start now
- Run in background
- Schedule

Parameters

Entity	Event	From Offset (days)	To Offset (days)	From Date	To Date
▼	▼	-365	-30	11/7/2022	10/8/2023

OK Cancel

From Date and **To Date** refer to when the event log records were archived, not when they were created. In the example above, event logs **created** between 1 year ago and 1 month ago are deleted.

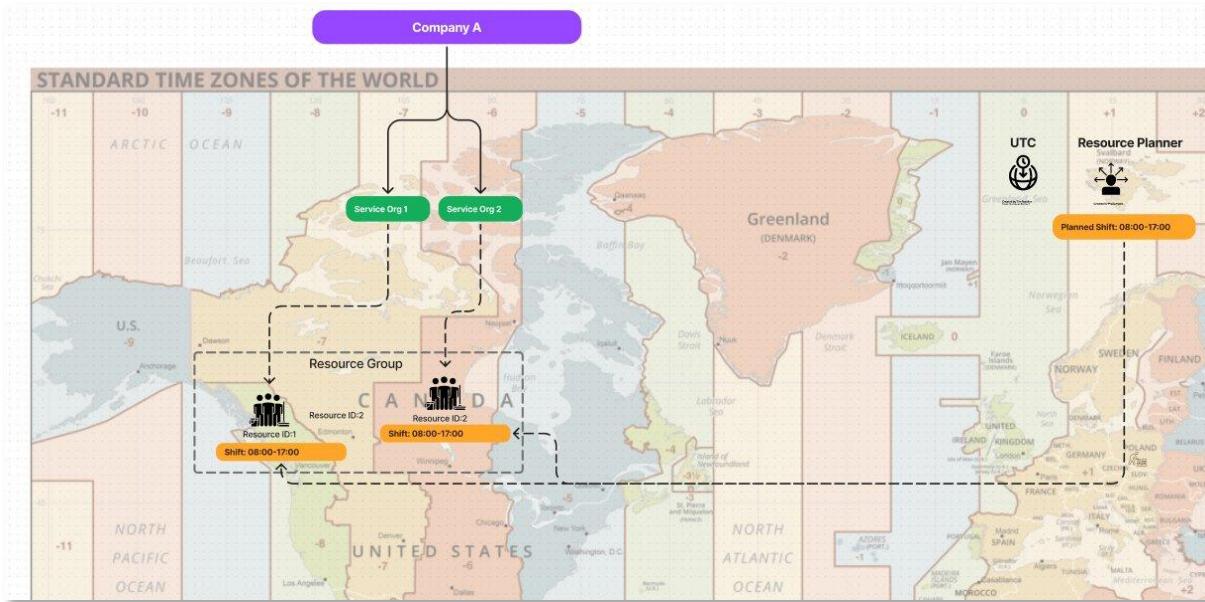
Portals (📝)

As of 25R1, this chapter only provides a list of the different portals. As soon as NGSM-enabled portals become available, more details will be provided here.

Portal	Supports Work Orders	Supports Requests	Framework Used	Comment
Current Technician Portal	✓	✗	IFS Cloud UI framework	
New Technician Portal	✗	✓	IFS Cloud UI framework	Part of a multi-release initiative, target release not confirmed.
B2B Portal	✓	✗	IFS Cloud UI framework	
Subcontractor Coordinator Portal	✗	✓	Customer Engagement (CE) framework	View orders, stock, resources, agreements, report executed jobs. Part of a multi-release initiative, target release not confirmed.
Subcontractor Execution Portal	✗	✓	Customer Engagement (CE) framework	Execute jobs. Part of a multi-release initiative, target release not confirmed.
Customer Engagement (CE) Portals	✓	✓		

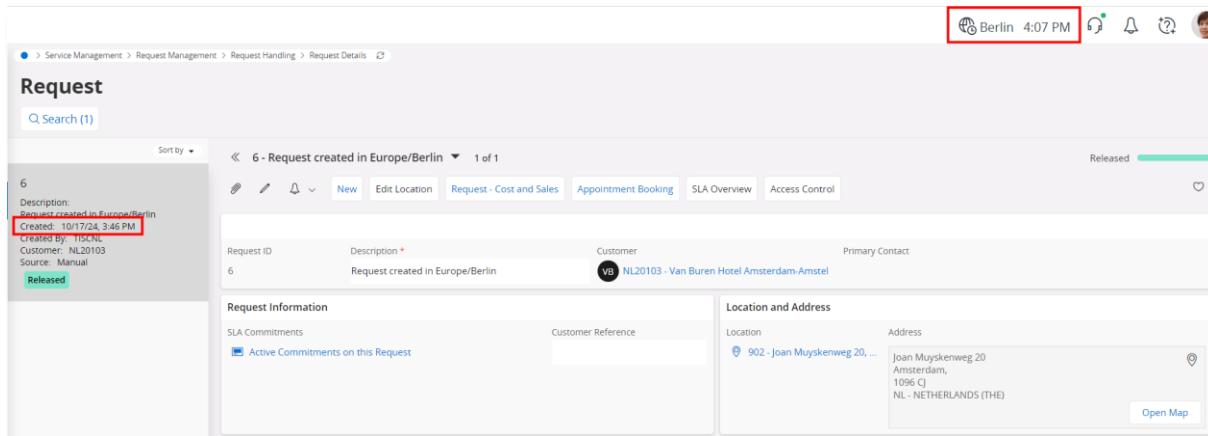
Time Zone Management in NGSM

IFS Cloud's Service Management is frequently deployed by global support operations where resource demand and capacity cover various time zones, managed by remote Shift Planners. It enables these planners and dispatchers to organize the global workforce effectively and ensures clarity on the time zone of key date/time fields.



Time Zone Management on Requests

Time zone information on the Request will be displayed in user's local time zone. Example: A Request is created in CET (Europe/Berlin) at 15:46.



If the same Request is reviewed by a user in US/Pacific time, creation is displayed as 6:46am.

Screenshot of the IFS Cloud Request Management interface showing a request details page. The top navigation bar includes 'Pacific 7:09 AM' and various icons. The main content shows a request for 'Request created in Europe/Berlin' with details like Request ID 6, Description 'Request created in Europe/Berlin', Customer 'NL20103 - Van Buren Hotel Amsterdam-Amstel', and Location '902 - Joan Muyskenweg 20, ...'. A red box highlights the 'Created: 10/17/24, 6:46 AM PDT' timestamp.

This also applies to Request-related details such as SLA Commitments.

Time Zone Management on Request Tasks

In the Request Work Task, the time stamps are displayed based on the time zone of the Service Organization's Time Zone Site. In the example above the Request is created for the Service Organization US West, site 101 uses time zone US/Pacific.

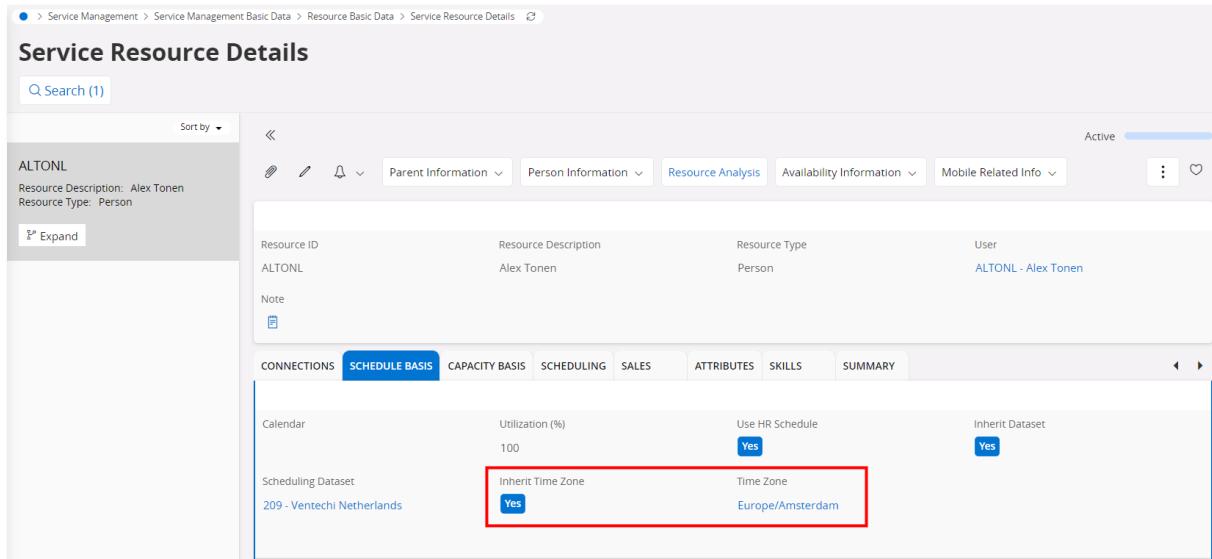
Screenshot of the IFS Cloud Service Organization management interface. It shows the details for 'Ventechi US West' with Service Organization ID 101. The 'Coordinator' is listed as 'IA * - IFS APPLICATIONS'. Under 'Organization Information', the 'Time Zone Site' is set to '101 - Ventechi US West', which is highlighted with a red box.

Task creation date is also displayed as 6:46am.

Screenshot of the IFS Cloud Task Details interface for task '438 - Corrective Maintenance'. The 'Task Details' section shows 'Task No' 438, 'Task Description' 'Corrective Maintenance', and 'Created Date' '10/17/24, 6:46 AM PDT'. A red box highlights the 'Created Date' field.

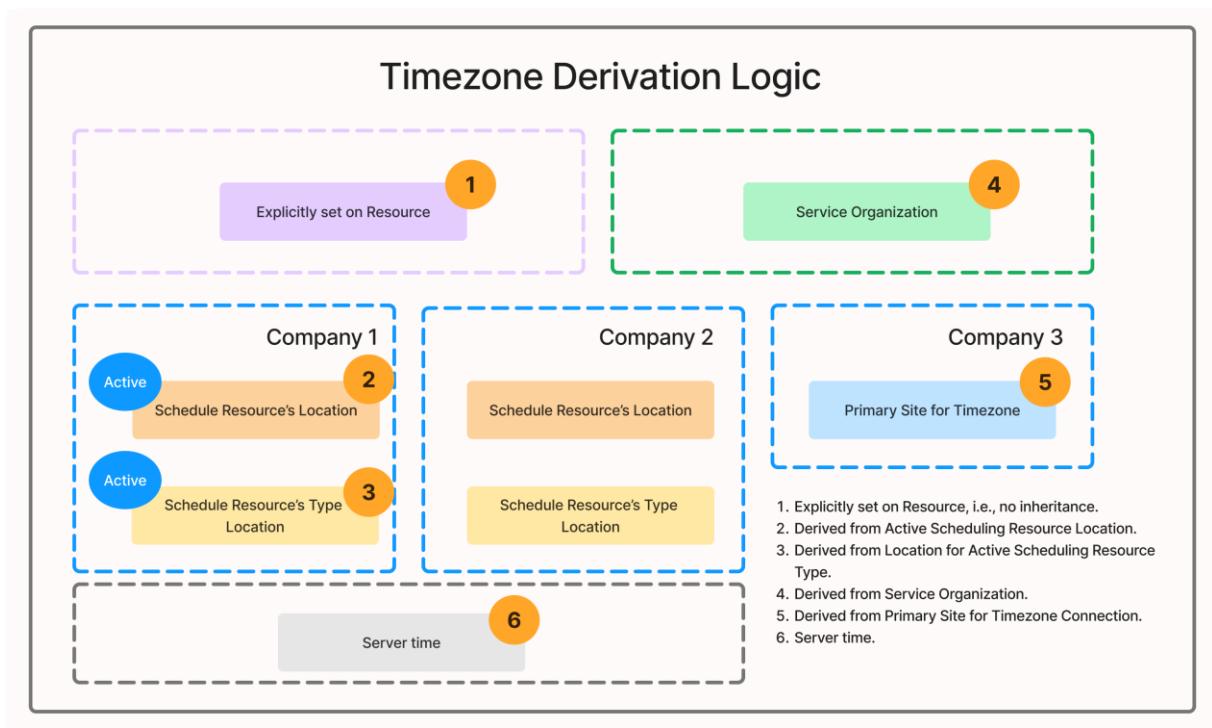
Time Zone Inheritance for Resources

The time zone can be set directly on the resource. If **Inherit Time Zone** is set to **Yes**, the time zone will be set automatically.



The screenshot shows the 'Service Resource Details' page for a resource named 'ALTONL'. The 'SCHEDULE BASIS' tab is selected. In the 'Inherit Time Zone' field, the value 'Yes' is highlighted with a red box. The 'Time Zone' field shows 'Europe/Amsterdam'. Other fields visible include 'Utilization (%)' at 100, 'Use HR Schedule' set to 'Yes', and 'Inherit Dataset' also set to 'Yes'.

Inheritance uses the following sequence:



Time Zone Visualization of Shift Information

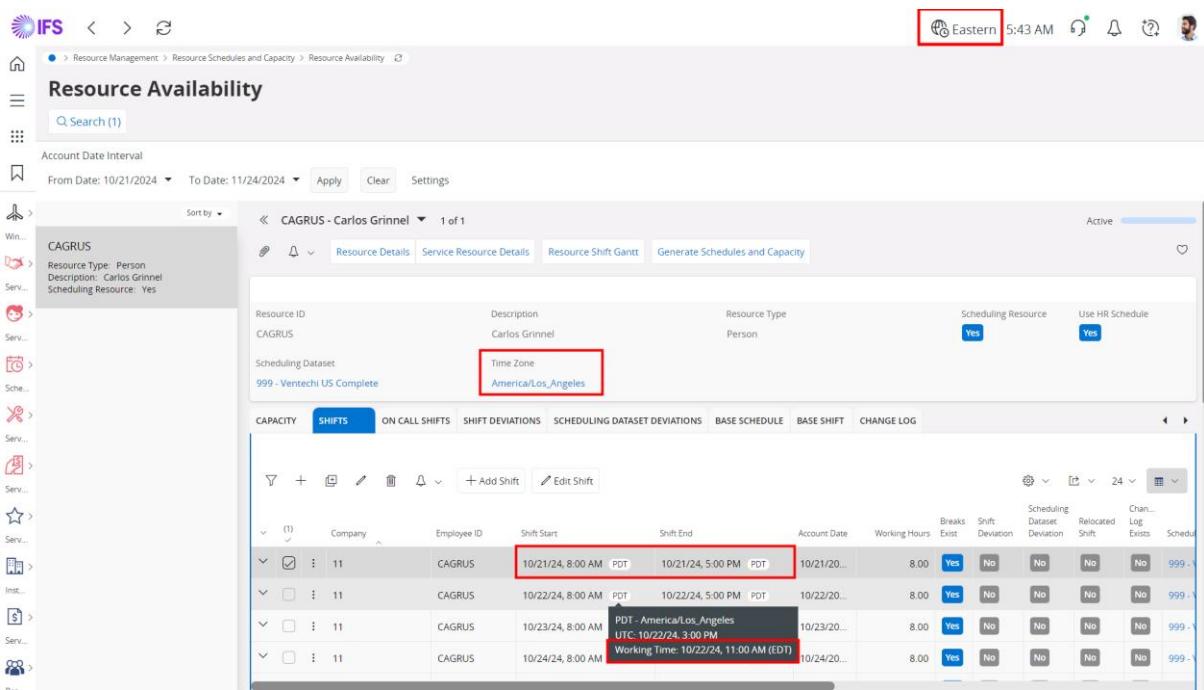
In Resource Management, date and time values are stored using the server's time but shown to users in their local time zone when needed.

There are instances where date and time data is shown from the resource's perspective, while in other situations, it reflects the user's local time zone. For instance, if a Shift Planner in North America

reviews the Resource Shift Gantt for a group of resources in various time zones, the Gantt will present the shift times based on the Shift Planner's viewpoint rather than the resource's. On the other hand, the Resource Availability page will show the shift times based on the resource's perspective.

Users can input values for a *DateTime* field in the application using either their local time zone or the resource's time zone, ensuring clarity and convenience.

The following screenshot depicts a resource in US West (America/Los_Angeles time zone), viewed by a resource manager in US East (US/Eastern time zone). The list shows the shifts in the time zone of the resource i.e., 8:00 AM – 5:00 PM. The time zone badge shows the time converted into the user's time zone (11:00 AM) plus the time in UTC.



Shift Start	Shift End	Time Zone
10/21/24, 8:00 AM PDT	10/21/24, 5:00 PM PDT	PDT - America/Los_Angeles UTC: 10/22/24, 3:00 PM
10/22/24, 8:00 AM PDT	10/22/24, 5:00 PM PDT	
10/23/24, 8:00 AM PDT	10/23/24, 5:00 PM PDT	
10/24/24, 8:00 AM PDT	10/24/24, 5:00 PM PDT	

Shift date/times are shown in the Resource's time zone (here: PST), but creation and modification timestamps appear in the User's time zone (here: EST). The same applies to the *Change Log*.

Employee ID	Shift Start	Shift End	Account Date	Working Hours	Breaks Exist	Shift Deviation	Scheduling Dataset Deviation	Relocated Shift	Chan... Log Exists	Modified By	Modified Date
11	10/21/24, 9:00 AM PDT	10/21/24, 6:00 PM PDT	10/21/2024	8.00	Yes	Yes	No	No	No	DOMCUS	10/22/24, 7:56 AM EDT
11	10/22/24, 8:00 AM PDT	10/22/24, 5:00 PM PDT	10/22/2024	8.00	Yes	No	No	No	No	TISCNL	10/22/24, 5:41 AM EDT
11	10/23/24, 8:00 AM PDT	10/23/24, 5:00 PM PDT	10/23/2024	8.00	Yes	No	No	No	No	TISCNL	10/22/24, 5:41 AM EDT

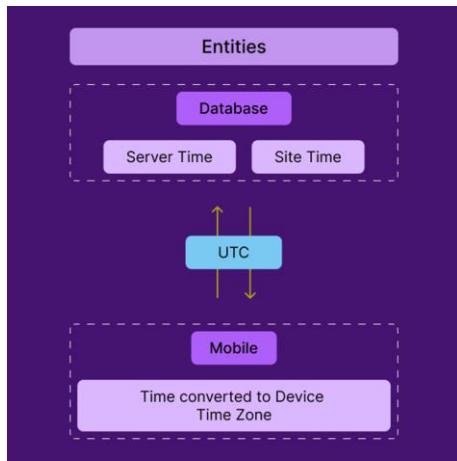
The Resource Shift Gantt visualizes data based on the user's local time zone. The screenshot below shows US/East and US/West resources that all use the same shift pattern from 8:00 AM to 5:00 PM. When visualized by a planner in US/East, the Gantt chart visualizes all shifts in her time zone.

When a shift is selected in the Gantt chart, a *Shift Information* window shows shift times (again in the user's time zone), working hours, etc.

To see Shift Start and End in the Resource's time zone, hover over the time zone badge.

Time Zone Support in MWO

In MWO, all *DateTime* values are stored in UTC and converted to the device's current time zone when displayed to the user. A change of the device time zone by the user will be handled by the system automatically.



Here's an example. An assignment from 10:30 AM to 12:30 PM was created for a user in US/Pacific time zone:

ASSIGNMENTS	RESOURCES	WORK STEPS	MATERIAL	RETURNS	SLA	TIME REPORTS	PLANNED COST AND SALES	COSTS	SALES	SERVICE NOTES	Filter	Print	24	Grid

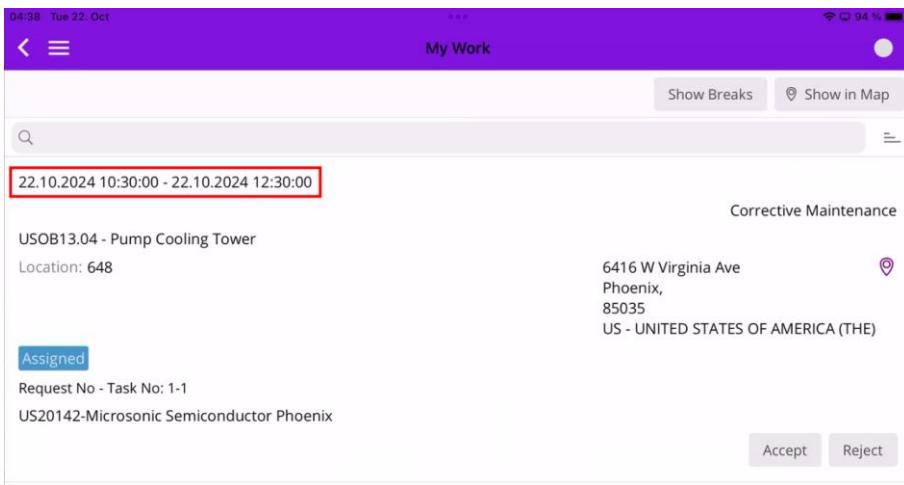
Assignment details:

Assignment No:	1	Resource Type:	Person	Allocated To:	CAGRUS - Carlos Grinell	Fixed Resource:	Yes	Allocated Hours:	2.00	Allocated Start:	10/22/24, 10:30 AM PDT	Allocated Finish:	10/22/24, 12:30 PM PDT	Assignment Start:
----------------	---	----------------	--------	---------------	-------------------------	-----------------	-----	------------------	------	------------------	------------------------	-------------------	------------------------	-------------------

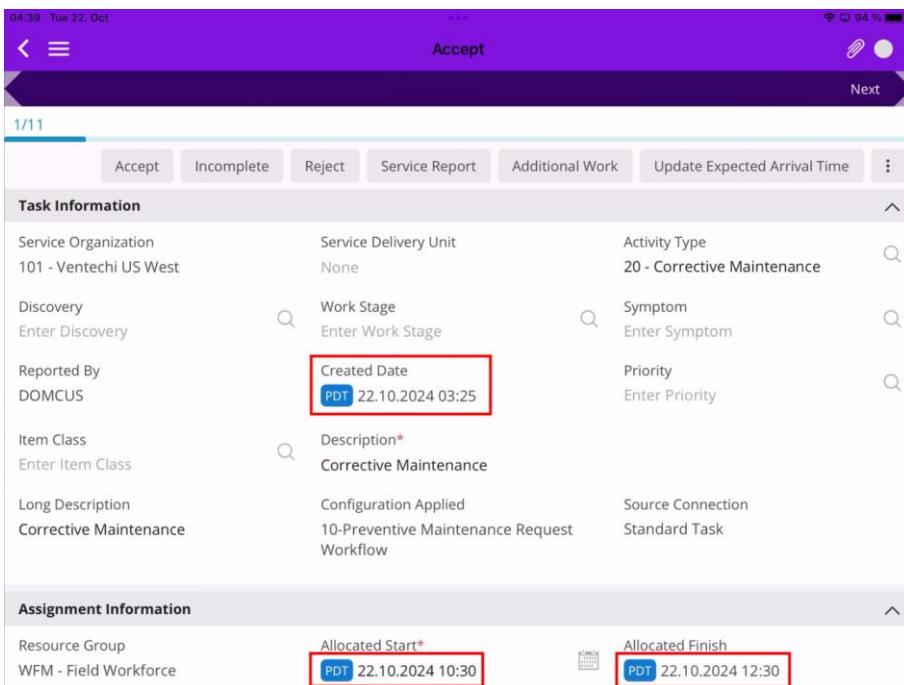
When transferred to MWO, the times are converted and stored in UTC:

Database Viewer	
Tables	jt_execution_instance
Columns	AllocatedFinish; AllocatedHours; AllocatedStart; Assignm...
Keyword Search	
Values	
AllocatedFinish	22.10.2024 19:30:00
AllocatedHours	2
AllocatedStart	22.10.2024 17:30:00
AssignmentFinish	null
AssignmentStart	null
ExecutionInstanceSeq	1
ResourceId	CAGRUS
TaskSeq	1
UserHasAssignment	TRUE
UserIsAssigned	TRUE

My Work shows the times converted into US/Pacific, the time zone of the device:



The *Detail Page* shows the same time including the local time zone:



When the time zone badge is tapped, the name of the current time zone and its conversion to UTC are displayed.

Service Organization
101 - Ventechi US

Discovery
Enter Discovery

Reported By
DOMCUS

Item Class
Enter Item Class

Long Description
Corrective Maintenance

Configuration Applied
10-Preventive Maintenance Request Workflow

Source Connection
Standard Task

Task Information

Assignment Information

Resource Group
WFM - Field Workforce

Allocated Start*
PDT 22.10.2024 10:30

Allocated Finish
PDT 22.10.2024 12:30

Time Zones in Search

Searches on Requests and Request Task follow the logic explained earlier. Let's use an example: A user in CET time zone creates a Request around 8:30 on Oct 29.

Request ID	Created	Description	Customer	Service Organization	Service Delivery Unit	Status	Edit Location	City	State
10	10/29/24, 8:27 AM CET	Request created around 8:30 CET	VB	NL20103 - Van Bur...	209 - Ventechi Netherla...	Released	Joan Mu...	Amsterdam	

For a user in Hawaii, it's still the evening of Oct 28, hence a search for Created=Oct 29 will not return any results.

Request ID	Description	Customer	Service Organization	Service Delivery Unit	Status	Edit Location	City	State
(No data)								

However, a user has the option to enforce a specific time zone for their search.

Service Management > Request Management > Request Handling > Requests

Requests

Search Advanced

Status ▾ Request ID ▾ Description ▾ Customer ▾ Created: CET, 10/29/2024 ▾ More ▾ Favorites Search Clear Saved Searches

Request ID	Description	Customer	Edit Location	City	State
(No data)					

Exact date
 Between two dates
 During
 In range

May Jun Oct 2024 TODAY

	SU	MO	TU	WE	TH	FR	SA
40			1	2	3	4	5
41	6	7	8	9	10	11	12
42	13	14	15	16	17	18	19
43	20	21	22	23	24	25	26
44	27	28	29	30	31		

Set

This time zone will then be used for the search, the result will still be displayed in the user's time zone.

Service Management > Request Management > Request Handling > Requests

Requests

Search Advanced

Status ▾ Request ID ▾ Description ▾ Customer ▾ Created: CET, 10/29/2024 ▾ More ▾ Favorites Search Clear Saved Searches

Request ID	Created	Description	Customer	Service Organization	Service Delivery Unit	Status	Edit Location	City
10	10/28/24, 9:27 PM HST	Request created around 8:30 CET	VB NL20103 - Van Bur...	209 - Ventechi Netherla...		Released	Joan Mu...	Amsterd...

For Request Tasks the result is different as they consider the Service Organization's time zone, not the user's time zone.

Service Management > Request Management > Request Task Handling > Request Work Tasks

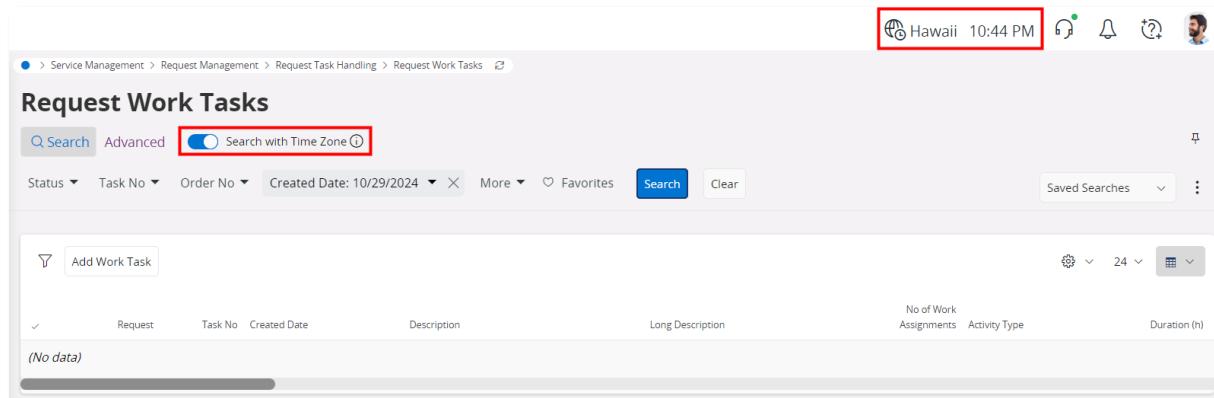
Request Work Tasks

Search Advanced Search with Time Zone

Status ▾ Task No ▾ Order No ▾ Created Date: 10/29/2024 ▾ More ▾ Favorites Search Clear Saved Searches

Request	Task No	Created Date	Description	Long Description	No of Work Assignments	Activity Type	Duration (h)
10	12	10/29/24, 8:27 AM CET	Task created around 8:30 CET	Corrective Maintenance	0	20 - Corrective Mainten...	2

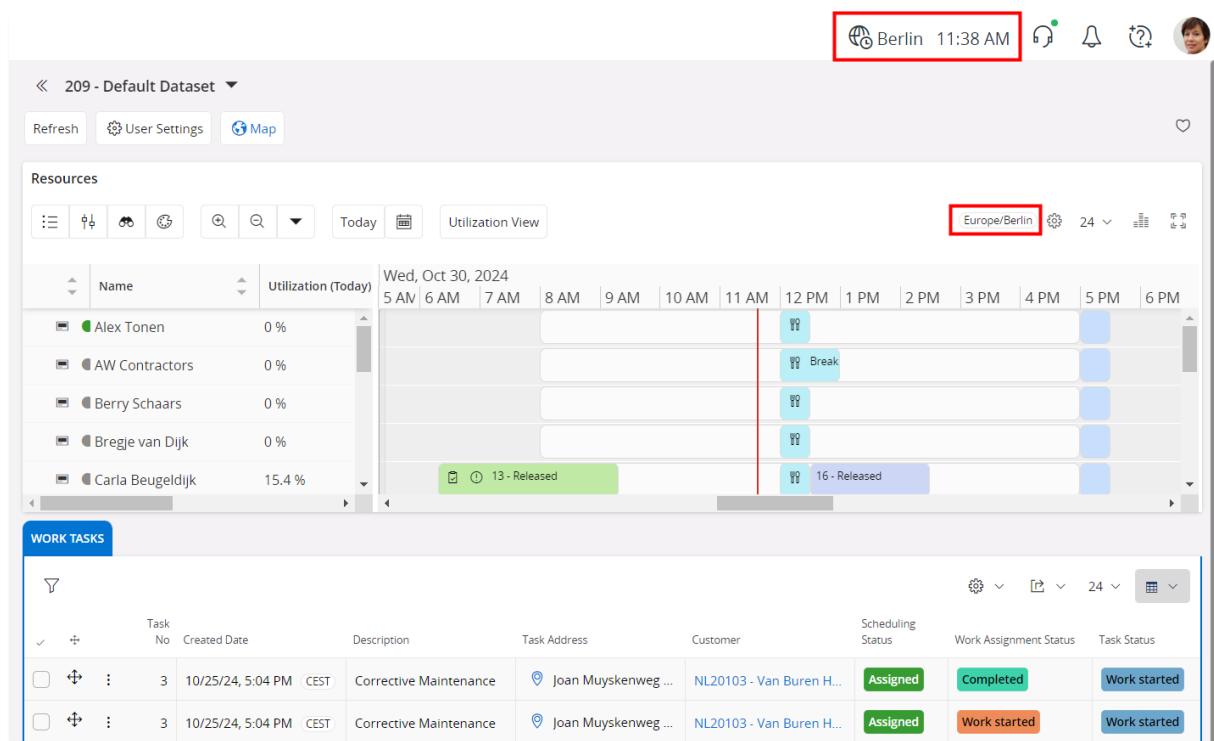
By enabling the **Search with Time Zone** toggle, you can specify a particular time zone for your search. For example, if you set it to Hawaii, you'll get the expected outcome of no records, since it's still October 28 in Hawaii.



The screenshot shows the 'Request Work Tasks' screen in the IFS Cloud interface. At the top right, there is a status bar with the location 'Hawaii' and the time '10:44 PM'. Below the status bar, there is a navigation bar with links: 'Service Management > Request Management > Request Task Handling > Request Work Tasks'. Underneath the navigation bar, there is a search bar with a 'Search with Time Zone' toggle switch, which is highlighted with a red rectangle. The main content area displays a table with columns: Request, Task No, Created Date, Description, Long Description, No of Work Assignments, Activity Type, and Duration (h). A message '(No data)' is shown at the bottom of the table.

Time Zones in Dispatch Console

Dispatch Console converts *DateTime* values into the user's time zone (specified in the Account Settings).



The screenshot shows the Dispatch Console interface. At the top right, there is a status bar with the location 'Berlin' and the time '11:38 AM'. Below the status bar, there is a navigation bar with a link: '<< 209 - Default Dataset'. Underneath the navigation bar, there is a 'Resources' section with a utilization view. The utilization view shows a timeline from 5 AM to 6 PM on Wednesday, Oct 30, 2024, with several scheduled tasks. One task is highlighted with a green bar labeled '13 - Released'. Another task is highlighted with a blue bar labeled '16 - Released'. To the left of the utilization view, there is a table of resources with their names and utilization percentages. Below the utilization view, there is a 'WORK TASKS' table. The table has columns: Task No, Created Date, Description, Task Address, Customer, Scheduling Status, Work Assignment Status, and Task Status. Two rows of data are shown, both related to task number 3, with details like 'Corrective Maintenance' and 'Assigned' status.

Both the tooltip and the details popup show the time zone code for *DateTime* fields.

Berlin 11:46 AM

Resources

Allocated Activity (Task No - 16)

Request Detail:
11 - Jobs for Bucket Resource

Service:
20 - Corrective Maintenance

Task Description:
Corrective Maintenance

Task Status:
Released

Scheduling Status:
Allocated

Allocation Start: 10/30/24, 12:39 PM CET Allocation Finish: 10/30/24, 2:39 PM CET

Duration(Hours): 2 Visit Id: 1

Customer: NL20103 - Van Buren H Fixed Allocated Start: No

Adjusted Duration: Fixed Resource: No

Exceptions: Task Dependencies: No

Joan Muyskenweg 20
Amsterdam,
1096 CJ
NL -

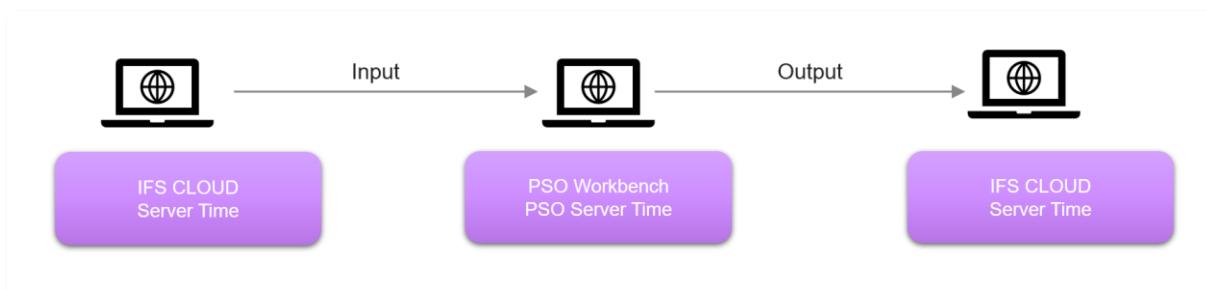
Open Map

WORK TASKS

(1)	Task No	Created Date	Description	Task Address	Customer
<input checked="" type="checkbox"/>	3	10/25/24, 5:04 PM CEST	Corrective Maintenance	Joan Muyskenweg ...	NL20103 - Van Buren H
<input type="checkbox"/>	3	10/25/24, 5:04 PM CEST	Corrective Maintenance	Joan Muyskenweg ...	NL20103 - Van Buren H
<input type="checkbox"/>	9	10/28/24, 8:26 AM CET	Corrective Maintenance	Joan Muyskenweg ...	NL20103 - Van Buren H
<input type="checkbox"/>	13	10/29/24, 12:28 PM CET	Corrective Maintenance	Joan Muyskenweg ...	NL20103 - Van Buren H
<input type="checkbox"/>	7	10/25/24, 5:58 PM CEST	Corrective Maintenance	Joan Muyskenweg ...	NL20103 - Van Buren H
<input type="checkbox"/>	12	10/29/24, 8:27 AM CET	Task created around 8:...	Joan Muyskenweg ...	NL20103 - Van Buren H

Time Zones in PSO

When *DateTime* information is sent to PSO, it includes the offset from the individual time zone per record e.g., per shift. Conversion will happen from IFS Cloud server time to PSO (uses UTC) and back to IFS Cloud server time.



When data is visualized in PSO, the Workbench uses the time zone defined by the end user. The example below shows a user in US/East who looks at a dataset covering all US. All resources work from 8:00 to 17:00, either in time zone US/East or US/West.

Dataset 999 Current Time Current Day Activities Colour Activities by... Status Filters Schedules Legend America/New_York 10/29/2024, 22:24:08

Resources Sort: Find: Find...

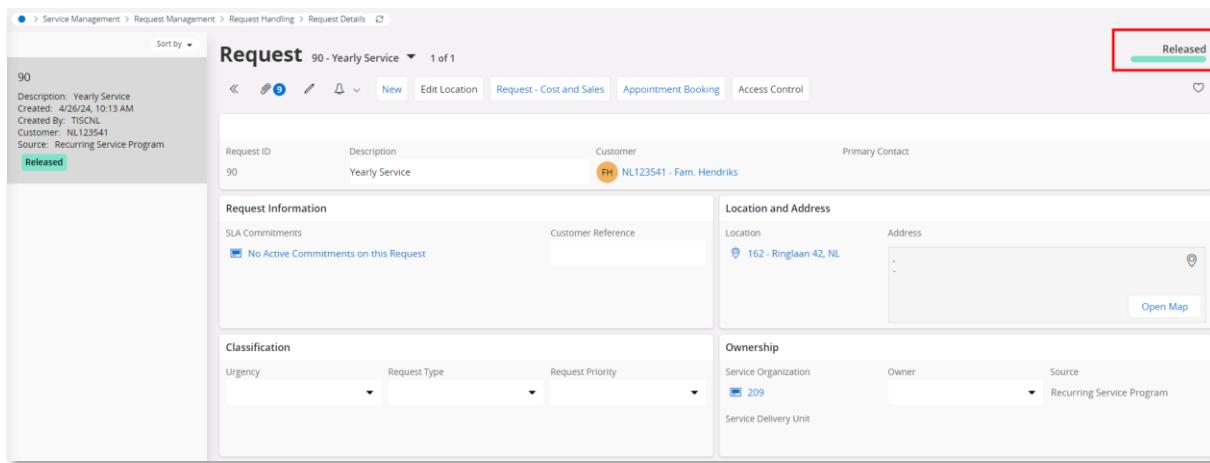
Resource	20:00	04:00	08:00	12:00	16:00	20:00	04:00	08:00	12:00	16:00	20:00	04:00
US East												
2247 Erica Parker												
2248 Jen Williams												
2249 Matt Rodgers												
2250 Philip Harkin												
2251 Van Mcall												
US West												
2240 Charles Martin												
2241 Carlos Grinnel												
2242 Jennifer Dawson												
2245 AW Contractors												
2246 ZX Contractors												

General IFS Cloud Capabilities

This chapter covers topics that are not exclusive to NGSM, but they are also relevant and useful for those who want to learn more. Sometimes they do not fully describe a feature, but instead refer to related documentation and only cover common pitfalls.

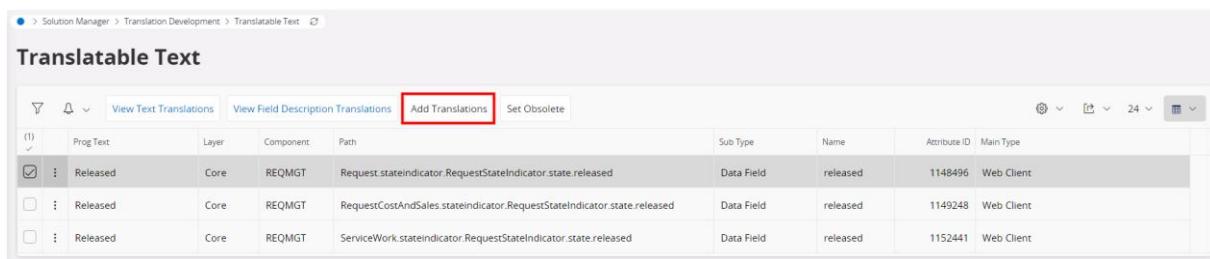
Translations

There is often a need to reflect existing terminology in labels or data. Here is an example of how to change a specific Request Status in the Request header.



The screenshot shows the 'Request Details' page for a service request. The top navigation bar includes 'Service Management > Request Management > Request Handling > Request Details'. The main content area displays a single request entry for 'Yearly Service' with ID 90. The status 'Released' is highlighted with a red box. Below the status, there are sections for 'Request Information' (SLA Commitments, Customer Reference), 'Location and Address' (Location: 162 - Ringlaan 42, NL), 'Classification' (Urgency, Request Type, Request Priority), and 'Ownership' (Service Organization: 209, Owner: 1148496, Source: Recurring Service Program). A 'Primary Contact' section is also visible.

Use DevTools or the Debug Panel to find the Component of the page, in this case “REQMGT”. Navigate to  *Solution Manager>Translation Development>Translatable Text*. Search for Component = REQMGT and use additional attributes to narrow down the search results.



The screenshot shows the 'Translatable Text' page in the Solution Manager. The top navigation bar includes 'Solution Manager > Translation Development > Translatable Text'. The main content area has tabs for 'View Text Translations' and 'View Field Description Translations', with 'Add Translations' highlighted with a red box. A table lists three entries for the word 'Released': one for 'ProgText' in 'Core' layer under 'REQMGT' component, and two for 'RequestCostAndSales.stateindicator.RequestStateIndicator.state.released' and 'ServiceWork.stateindicator.RequestStateIndicator.state.released' in 'Core' layer under 'REQMGT' component. Each entry includes fields for Sub Type (Data Field), Name (released), Attribute ID (1148496, 1149248, 1152441), and Main Type (Web Client).

Use **Add Translations** to add or change a translation for any of the installed languages.

Add Translation

Translatable Text

Prog Text	Component
Released	REQMGT

Path

Request.stateindicator.RequestStateIndicator.state.released

Translations

	Language Code	Translation
:	zh - Chinese - simplified	已发布
:	cs - Czech	Uvolněno
:	da - Danish	Frigivet
:	nl - Dutch	Vrijgegeven
:	en - English	Request Released
:	fi - Finnish	Vapautettu

Save it. Back in the list of Translatable Texts select **View Text Translations**.

Solution Manager > Translation Development > Translatable Text

Translatable Text

	Prog Text	Layer	Component	Path	Sub Type	Name	Attribute ID	Main Type
<input checked="" type="checkbox"/>	Released	Core	REQMGT	Request.stateindicator.RequestStateIndicator.state.released	Data Field	released	1148496	Web Client
<input type="checkbox"/>	Released	Core	REQMGT	RequestCostAndSales.stateindicator.RequestStateIndicator.state.released	Data Field	released	1149248	Web Client
<input type="checkbox"/>	Released	Core	REQMGT	ServiceWork.stateindicator.RequestStateIndicator.state.released	Data Field	released	1152441	Web Client

Select the updated one and click **Refresh Language Cache>By Path**.

Solution Manager > Translation Development > Text Translations

Text Translations

	Layer	Language	Lang Description	Translatio	By Language	Text	Translation Prog Text	Status	Component	Path
<input type="checkbox"/>	Core	ar	Arabic	العربية	By Component	Released	Request Released	Ok	REQMGT	Request.stateindic
<input type="checkbox"/>	Core	bp	Portuguese (Brazilian)	Liberado	By Path	Released	Request Released	Ok	REQMGT	Request.stateindic
<input type="checkbox"/>	Core	cf	French (Canadian)	Libéré	By Path and Child	Released	Request Released	Ok	REQMGT	Request.stateindic
<input type="checkbox"/>	Core	cs	Czech	Uvolněno	By Path	Released	Request Released	Ok	REQMGT	Request.stateindic
<input type="checkbox"/>	Core	da	Danish	Frigivet	By Path	Released	Request Released	Ok	REQMGT	Request.stateindic
<input type="checkbox"/>	Core	de	German	Freigegeben	By Path	Released	Request Released	Ok	REQMGT	Request.stateindic
<input checked="" type="checkbox"/>	Core	en	English	Request Released	By Path	Released	Request Released	Ok	REQMGT	Request.stateindic
<input type="checkbox"/>	Core	es	Spanish	Lanzado	By Path	Released	Request Released	Ok	REQMGT	Request.stateindic

Refresh the browser cache.

Request 90 - Yearly Service ▾ 1 of 1

Request ID: 90 Description: Yearly Service Customer: NL123541 - Fam. Hendriks Primary Contact:

Request Information SLA Commitments: No Active Commitments on this Request

Location and Address: Location: 162 - Ringlaan 42, NL Address: , Open Map

Audit Trail/History Log

The History feature allows you to record all the important transactions in the database. You can configure it to monitor changes such as inserts, updates, or deletes on the table level and then log the selected attributes. While **Event Management** creates an event log geared towards an end user, the Audit Trail provides a rather technical list of changes on a field-level basis.

Activate History Logging at **Solution Manager>Monitoring>History>History Log Configuration**. If the entity/table is not yet activated for logging, use **Enable History Log**.

Setup History Log Request Management - SrvRequest ▾ 2 of 2

Entity: SrvRequestScope Module Name: Request Management

History Setting Group: Module: REQMGT Module Name: Request Management Entity: SrvRequest Table Name: SRV_REQUEST_TAB

Enable History Log

History Logging is not enabled for this entity

Select the fields that should be audited. As the History Log can create huge amounts of data, **Automatic History Removal** can be used to automatically purge log entries after a defined time.

Setup History Log Request Management - SrvRequest ▾ 2 of 2

History Setting Group: Module: REQMGT Module Name: Request Management Entity: SrvRequest Table Name: SRV_REQUEST_TAB

Remove history older than(days): 30 Automatic History Removal:

	Column Name	Log Insert	Log Update	Log Delete
<input type="checkbox"/>	URGENCY_ID	No	Yes	No
<input type="checkbox"/>	SOURCE	No	No	No
<input type="checkbox"/>	SERVICE_DELIVERY_UNIT	No	No	No

Logging will start immediately. In the example above, updates of the Request Urgency...

Request 90 - Yearly Service ▾ 1 of 1 Released

« ⏪ 9 ⏩ ⏴ New Edit Location Request - Cost and Sales Appointment Booking Access Control ⏵

Request ID 90	Description Yearly Service	Customer FH NL123541 - Fam. Hendriks	Primary Contact
Request Information		Location and Address	
Classification		Ownership	
Urgency 2 - High	Request Type	Service Organization 209	Owner
Request Priority	Source	Service Delivery Unit	
	Recurring Service Program		

...are shown in the History Log at *Solution Manager>Monitoring>History>History Log*. The user must have QUERY grants on the logical unit **History Log**.

⬧ Solution Manager > Monitoring > History > History Log

History Log

⬧ Details

(2)	Component	Lu Name	Table Name	History Type	Log ID	Created	Keys	Note	Transaction ID	User
<input checked="" type="checkbox"/>	REQMGT	SrvRequest	SRV_REQUEST_TAB	Update	2	4/30/24, 3:09 PM	REQ_ID=90^		17.23.1334677	TISCNL
<input checked="" type="checkbox"/>	REQMGT	SrvRequest	SRV_REQUEST_TAB	Update	1	4/30/24, 3:09 PM	REQ_ID=90^		14.25.1668765	TISCNL

Details shows which user did which kind of update, including old and new field values.

⬧ Solution Manager > Monitoring > History > History Log > History Log - 2 SrvRequest

History Log - 2 SrvRequest

2 - SrvRequest ▾ 2 of 2

1 Lu Name: SrvRequest

2 Lu Name: SrvRequest

Log ID 2	Update Type Update	User TISCNL	Time 4/30/24, 3:09 PM
Component REQMGT	Object Type SrvRequest	Table Name SRV_REQUEST_TAB	
Object REQ_ID: 90			

⬧

Column Name	Old Value	New Value
Urgency id	3	2

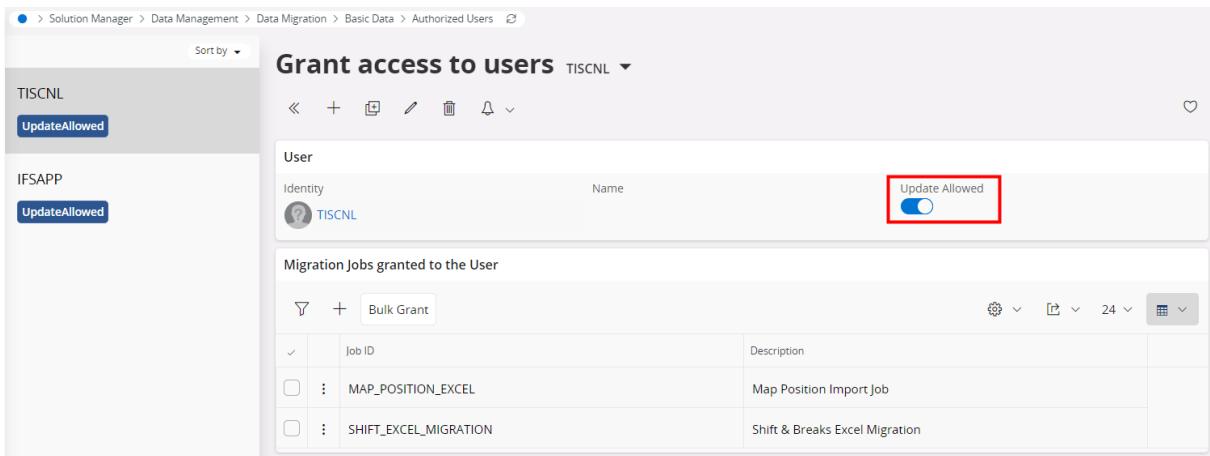
Data migration using the Excel Add-in

Install the Excel Add-in

To install the Excel Add-in, use these instructions: [IFS Cloud Excel Add-in | IFS Community](#)

Allow the User to Access Migration Jobs

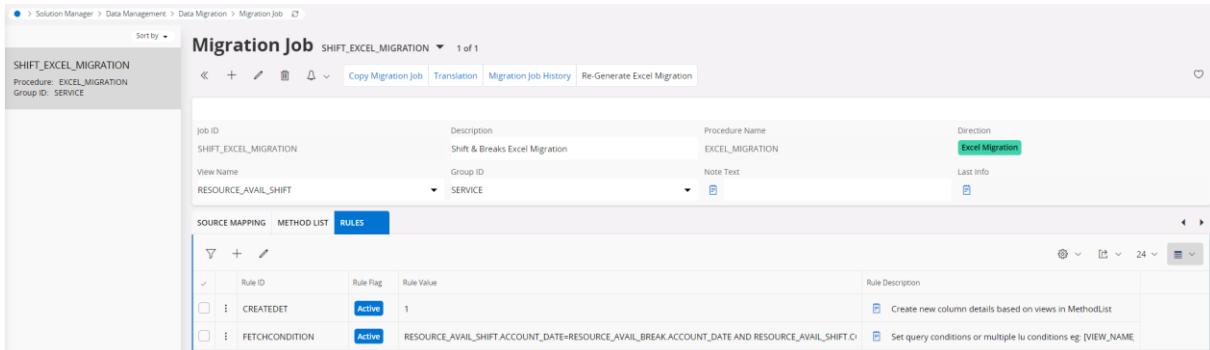
Allow your user to access migration jobs.  **Solution Manager>Data Management>Data Migration>Basic Data>Authorized Users.** Make sure to activate **Update Allowed**. This page can also be used later to grant users access to newly created Migration Jobs.



The screenshot shows the 'Grant access to users' interface. On the left, there's a sidebar with 'TISCNL' and 'IFSAPP' listed, each with an 'UpdateAllowed' button. The main area is titled 'Grant access to users' and shows a table for 'User'. A row for 'TISCNL' has an 'Identity' column showing a profile picture and the name 'TISCNL'. To the right of the name is a 'Name' column and an 'Update Allowed' toggle switch, which is highlighted with a red box. Below this is a section titled 'Migration Jobs granted to the User' with a table listing 'Job ID' and 'Description'. Two entries are shown: 'MAP_POSITION_EXCEL' (Map Position Import Job) and 'SHIFT_EXCEL_MIGRATION' (Shift & Breaks Excel Migration).

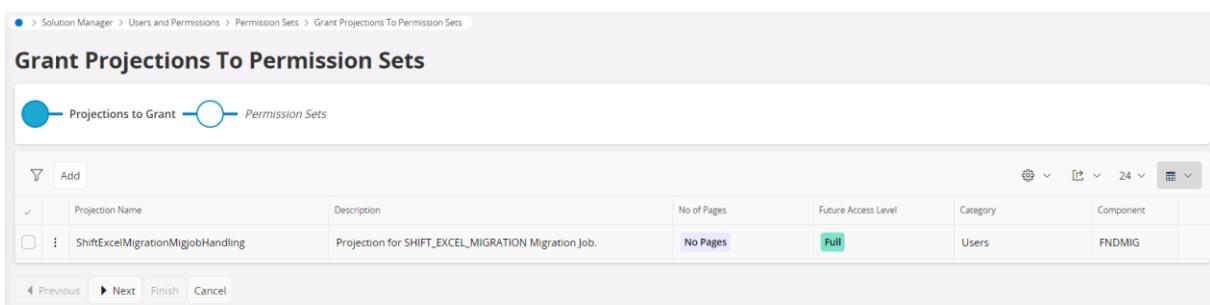
Create the Migration Job

Create a new migration job at **Solution Manager>Data Management>Data Migration>Migration Jobs.** Refer to the page help for details.



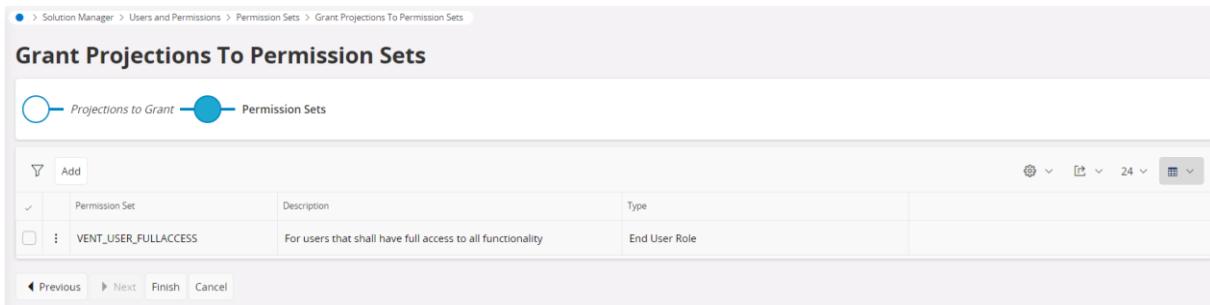
The screenshot shows the 'Migration Job' configuration screen for 'SHIFT_EXCEL_MIGRATION'. At the top, it shows 'Procedure: EXCEL_MIGRATION' and 'Group ID: SERVICE'. The main area has tabs for 'Job ID', 'View Name', and 'RESOURCE_AVAIL_SHIFT'. Below these is a 'RULES' tab. The 'RULES' table has columns for 'Rule ID', 'Rule Flag', 'Rule Value', and 'Rule Description'. It contains two entries: 'CREATEDET' (Active, Rule Value 1) and 'FETCHCONDITION' (Active, Rule Value RESOURCE_AVAIL_SHIFT.ACCOUNT_DATE=RESOURCE_AVAIL_BREAK.ACCOUNT_DATE AND RESOURCE_AVAIL_SHIFT.C...'). There are also buttons for 'Create new column details based on views in MethodList' and 'Set query conditions or multiple lu conditions eg: {VIEW_NAME}'.

The migration job creates its own projection, which the user needs to be given access to at  **Solution Manager>Users and Permissions>Permission Sets>Grant Projections to Permission Sets.** You can find the newly created projection based on the naming, which starts with "Projection for" followed by your migration job.



The screenshot shows the 'Grant Projections To Permission Sets' screen. It has a header with 'Projections to Grant' and 'Permission Sets'. Below is a table with a single row for 'ShiftExcelMigrationMigjobHandling'. The table columns are 'Projection Name', 'Description', 'No of Pages', 'Future Access Level', 'Category', and 'Component'. The 'Projection Name' is 'ShiftExcelMigrationMigjobHandling', 'Description' is 'Projection for SHIFT_EXCEL_MIGRATION Migration Job.', 'Future Access Level' is 'Full', 'Category' is 'Users', and 'Component' is 'FNDMIG'. At the bottom, there are navigation buttons: 'Previous', 'Next', 'Finish', and 'Cancel'.

In the second step, select the Permission Set(s) that the Projection should be granted to.

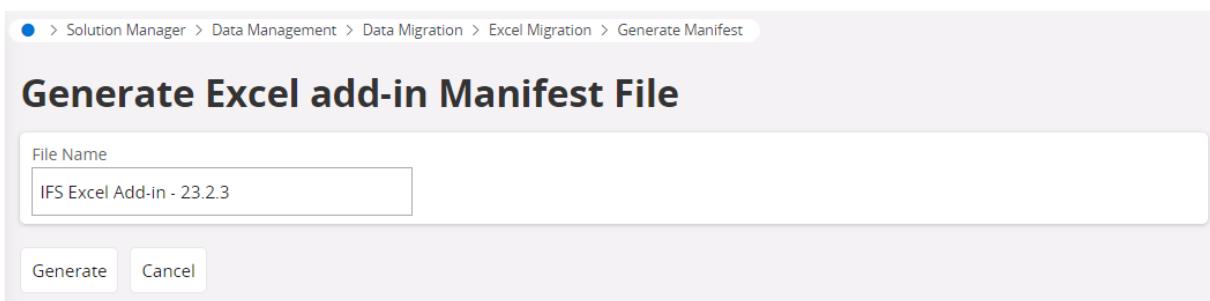


Projection to Grant	Permission Sets
<input checked="" type="checkbox"/> VENT_USER_FULLACCESS	For users that shall have full access to all functionality End User Role

This procedure needs to be repeated every time you re-generate the add-in.

Generate Excel Add-in

Generate the add-in at  **Solution Manager>Data Management>Data Migration>Excel Migration>Generate Manifest.**



File Name
IFS Excel Add-in - 23.2.3

Generate Cancel

When working with multiple IFS Cloud instances, add a suffix to the file name to be able to distinguish them in Excel.

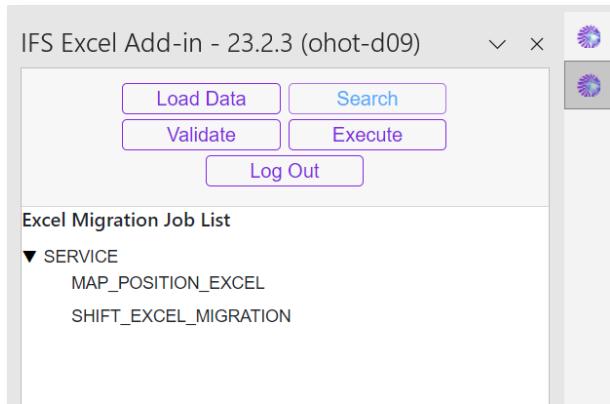
Note: The version tag in the manifest file is set using the “release version” in the generated file name. If you remove the version part from the generated file name and generate the manifest, version will be set as empty tag in the xml and Excel will not display the add-in at all. So either leave the version in the name or provide a version number in the saved XML e.g., like <Version>24.1.3</Version>.



Click **Generate** and copy the downloaded XML file to the network location created earlier.

Run the Excel Add-in

Start Excel and login to the add-in.



Select your migration job in the *Excel Migration Job List*. This will populate the worksheet with the table columns. **Load Data** loads the data from the table, **Search** allows record filtering. After making changes click **Validate** to check if the updates would be accepted by IFS Cloud. This will add a column with validation messages. If all looks good, select **Execute**.

Approvals

Approval Templates are a robust feature of the IFS Cloud platform, enabling the flexible creation of approval chains for any entity. These approval chains consist of multiple steps, where a preceding step, if present, must be approved before the subsequent step can commence. Should a preceding step be rejected, the subsequent step cannot begin. Each step may require one or more approvers. Steps can also be replicated from an existing approval template. An approval template can either be utilized as-is or modified by adding additional steps. Each step in the template is assigned to an individual or group responsible for its approval.

In the following example, our objective is to associate an approval template immediately upon the creation of a new Request Contract. The contract may only be activated once all necessary approvals have been obtained. The example can be adapted for other entities.

Step 1 – Enable the Entity for Approvals

Navigate to  *Solution Manager>Object Connections>Object Connections* and find the **ScServiceContract** entity. Select **Edit**. Add **ApprovalRouting** to the list of Connected Services. Please ensure you click the check mark to save the changes, and then click OK.

Edit Object Connection

Connection

Logical Unit	Description
SCServiceContract	Sc Service Contract

Available Services

- Find
- AuditObjectConnection
- CapaObjectConnection
- CcCaseObjectConnection
- ChangeObjectConnection
- DocRequirementObject

Connected Services

- DocReferenceObject
- EventLog
- ApprovalRouting

Save for current Connection

Attributes

View Name	Package Name	Method Name
SC_SERVICE_CONTRACT	SC_SERVICE_CONTRACT_API	

OK Cancel

Step 2 – Create an Approval Template

Navigate to  Document Management>Basic Data>Approval Template and create a record as per the example below.

Document Management > Basic Data > Approval Template

Approval Template

Search

Sort by ▾

REQCON1

Description: Request Contract Approval

Approval Template Description *

REQCON1 Request Contract Approval

Approval Steps

Copy Approval Template

(1)	Approval Step No	Description	Person ID	Group ID	Security Checkpoint Required
<input checked="" type="checkbox"/>	10	TISCNL Approval	 TISCNL - Tina Scheers		No

Our example only has one step with a single approver, feel free to add more steps or use Approver Groups, which are maintained at  Document Management>Basic Data>Person Group.

Document Management > Basic Data > Person Group

Person Group

Search (3)

Sort by		<< P-01 - Project Manager Approval 1 of 3	
P-01	Description: Project Manager Approval		
P-02	Description: Project Controller Approval		
P-03	Description: Project Director Approval		
Group ID		Description *	
P-01		Project Manager Approval	
Group Members			
		24	
Person		User ID	Note
		SUUSUS	

Navigate to Service Management>Request Contract Management>Request Contract, create a new contract, and use **Copy Approval Template** to associate the template that we just created.

Service Management > Request Contract Management > Request Contract

Request Contract

Search (1)

Sort by		<<		Planned	
5					
Contract Name:		New	Activate	Copy	Pre Posting
Service Contract 2024/25		... New Quotation	Document Text (0)	Analysis	
Customer No: NL20103					
Customer Name:					
Van Buren Hotel Amsterdam-Amstel					
CONTRACT LINES		INVOICING	AGREEMENTS	ADDITIONAL CUSTOMERS	RECURRING SERVICE PROGRAMS
Contract Lines		VALID SERVICE ORGANIZATIONS	SERVICE NOTES		
		Line No	Description	Valid From	Valid To
		(No data)			
Attachments					
DOCUMENTS		APPROVAL PROCESS (1)	EVENTS		
New Approval Step		Copy Approval Template			
10 - TISCNL Approval					
		TISCNL			
Note:					
Approve Step		Reject Step			

We don't want this to happen manually, we'll therefore create a BPA workflow that 1) associates the approval template and 2) rejects activation unless all approval steps have been completed.

Step 3 – Determine how the Approval is associated to the Entity

Navigate to Solution Manager>Configuration>Query Designer>New Query and find the **ApprovalRouting** entity. Add the attributes **LuName** and **KeyRef** and create a filter for LuName = **ScServiceContract**.

Solution Manager > Configuration > Query Designer > New Query

Query Designer

Entities

Selected Entities	Attributes
ApprovalRouting	Search attributes
All Entities	<input checked="" type="checkbox"/> KeyRef <input checked="" type="checkbox"/> LineNo <input checked="" type="checkbox"/> LuName <input type="checkbox"/> Note <input type="checkbox"/> Objkey <input type="checkbox"/> PersonId
ApprovalRouting	Show more

Selected Attributes

LuName	KeyRef
ScServiceContract	CONTRACT_ID=1^
ScServiceContract	CONTRACT_ID=3^
ScServiceContract	CONTRACT_ID=4^
ScServiceContract	CONTRACT_ID=5^

References

ApprovalRouting LuName Is equal to Value ScServiceContract

Add Condition Add Condition Group

Filters Joins Group by

What we need for the BPA is the structure of the KeyRef: **CONTRACT_ID=<number>^**.

Step 4 – Create the BPA Workflow

Copy the BPMN from Appendix/BPMN of the Approval BPA Workflow and paste it into your preferred text editor. Save the file with the extension **.bpmn**. Navigate to Solution Manager>Workflow Manager> Workflows and select **Upload**, choose the BPMN file just created.

Expand to **version_1**, choose **Design**.

Solution Manager > Workflow Manager > ReqConApproval | version_3 > Workflow Designer

Workflow Designer

ReqConApproval

- General**: Id: ReqConApproval, Name: ReqConApproval, Version Tag:
- External Task Configuration**: Task Priority:
- Job Configuration**: Job Priority:
- Candidate Starter Configuration**: Candidate Starter Groups:

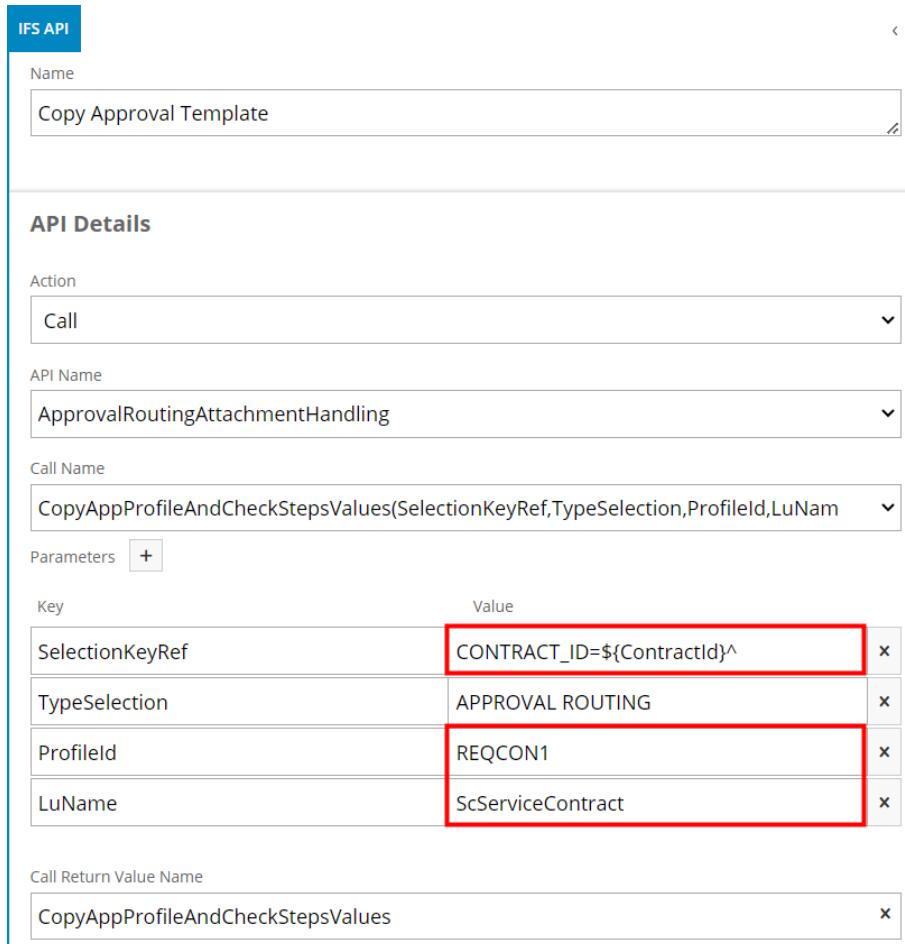
BPMN.io

Let's explore – and if needed adapt – the process. The initial “Is New” branch is used when the following condition evaluates to true:

```
execution.getVariable("ifsBpaCurrentProjectionName") == "CreateServiceContractHandling"
```

If you configure approvals for another entity, replace **CreateServiceContractHandling** with the appropriate projection. Note that this BPA is only triggered through the UI, not when records are created using a different API.

The **Copy Approval Template** step uses the **ApprovalRoutingAttachmentHandling** API to copy an Approval Template to the target entity.



The screenshot shows the configuration of a BPA step named 'Copy Approval Template'. It includes fields for Action (set to 'Call'), API Name ('ApprovalRoutingAttachmentHandling'), Call Name ('CopyAppProfileAndCheckStepsValues(SelectionKeyRef,TypeSelection,ProfileId,LuName)'), and Parameters. The parameters table has four rows:

Key	Value
SelectionKeyRef	CONTRACT_ID=\${ContractId}^
TypeSelection	APPROVAL ROUTING
ProfileId	REQCON1
LuName	ScServiceContract

The 'Value' column for all four parameters is highlighted with a red box.

SelectionKeyRef uses the KeyRef syntax that we determined in the previous step. **ProfileId** is the name of the Approval Template, **LuName** is the entity to which the approval gets associated. Adapt these parameters when creating approvals for a different entity.

The “Is Activate” branch is the default branch for all other BPA triggers i.e., the contract activation (see below). The **Read Approval Routing** step also uses the **ApprovalRoutingAttachmentHandling** API to read the approval steps associated to the current contract.

```
(lu_name = 'ScServiceContract' AND key_ref = 'CONTRACT_ID='||${ContractId}||'^')
```

If you configure approvals for another entity, change this parameter accordingly.

IFS API

Name: Activity_1vzkost

API Details

Action: Read

API Name: ApprovalRoutingAttachmentHandling

EntitySet Name: ApprovalRoutingSet

Parameters: +

Nested Entity Name:

Nested Entity Parameters: +

Filter: (lu_name = 'ScServiceContract' AND key_ref = 'CONTRACT_ID=' || \${ContractId} || '^')

Define a filter: ↓A

Order by:

- Read Collection
- Override ETag

ETag Variable Name: ApprovalRoutings_Log

Specify the name of the execution variable into which errors messages are copied. e.g. <ProjectionName>_Error_Log

Every record of the response will include the attribute **CurrentStepNo**, which is a positive number if a step is open or rejected, a negative number means all steps were approved. This logic is used by the two conditions in the workflow branch. The “Activate” transaction is terminated if there are no approval routings or if **CurrentStepNo>0**, in all other cases the BPA ends successfully. Both termination steps have a message parameter that allows specifying the error message in multiple languages. These two conditions don't need to be changed.

Save the BPA workflow and **Deploy** it as **ReqConApproval**. Leave the BPA designer.

Step 5 – Create the BPA Workflow Triggers

The BPA should be triggered in two cases, 1) when a new Request Contract is created and 2) when it's activated. Create two Projection Actions for that.

Solution Manager > Workflow Manager > ReqConApproval

ReqConApproval

Workflow Information

Process Key	Module	Is Template
ReqConApproval		No

Projection Action Information

Projection Id	Projection Name	Action Type	Entity Set Name	Navigation Properties	Call Name	Workflow Type	Workflow Timing	Action Enabled	Create	Read	Update	Delete
38	CreateServiceContractHandling	DATA	RequestContractSet			Validation	After	No	Yes	No	No	No
39	ServiceContractHandling	CALL			ScServiceContract_Activate() Void	Validation	After	No	No	No	No	No

Event Action Information

Event ID	Event LU Name	Workflow Type	Workflow Timing	Event Enable	Action Enable	New Row	Modify Row	Remove Row	Action Number	Event Type
(No data)										

Action #1 uses the **CreateServiceContractHandling** projection. This trigger will run the “Is New” branch of the BPA workflow.

Projection Action Configuration

Projection General Info → Action Details → Enable Projection Action

Projection Name: CreateServiceContractHandling

Buttons: Previous, Next, Finish, Cancel

It's triggered upon **Create** on the **RequestContractSet** Entity Set, Type=**Validation**, Timing=**After**.

Projection Action Configuration

Projection General Info → Action Details → Enable Projection Action

Choose Projection Action Type

Action Type: DATA

Entity Set Name: RequestContractSet

CRUD Action

READ: Off, CREATE: On, UPDATE: Off, DELETE: Off

Execution

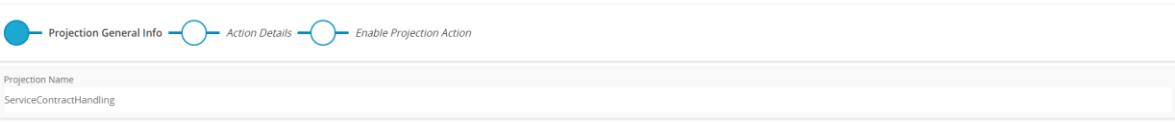
Type: Validation, Timing: After

Buttons: Previous, Next, Finish, Cancel

Select **Next**, **Enable Projection Action** and **Finish**.

Action #2 uses the **ServiceContractHandling** projection. This trigger will run the “Is Activate” branch of the BPA workflow.

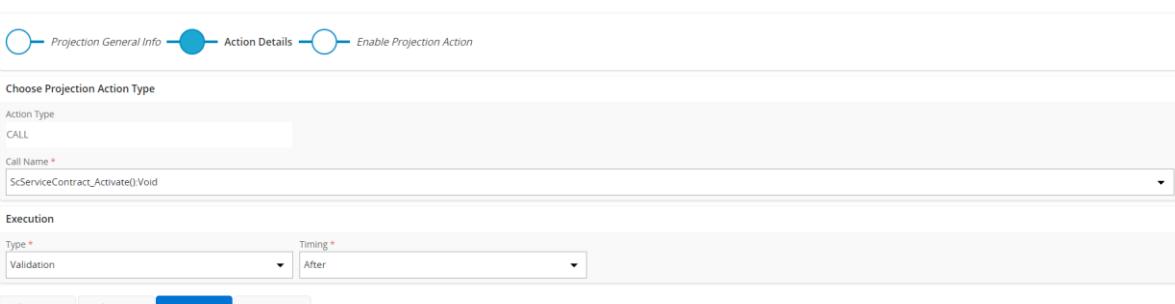
Projection Action Configuration



This screenshot shows the first step of the 'Projection Action Configuration' wizard. It has three tabs at the top: 'Projection General Info' (selected), 'Action Details', and 'Enable Projection Action'. Below the tabs, there's a 'Projection Name' field containing 'ServiceContractHandling'. At the bottom are buttons for 'Previous', 'Next', 'Finish' (highlighted in blue), and 'Cancel'.

It's triggered by the **ScServiceContract_Activate():Void** call, Type=**Validation**, Timing=**After**.

Projection Action Configuration



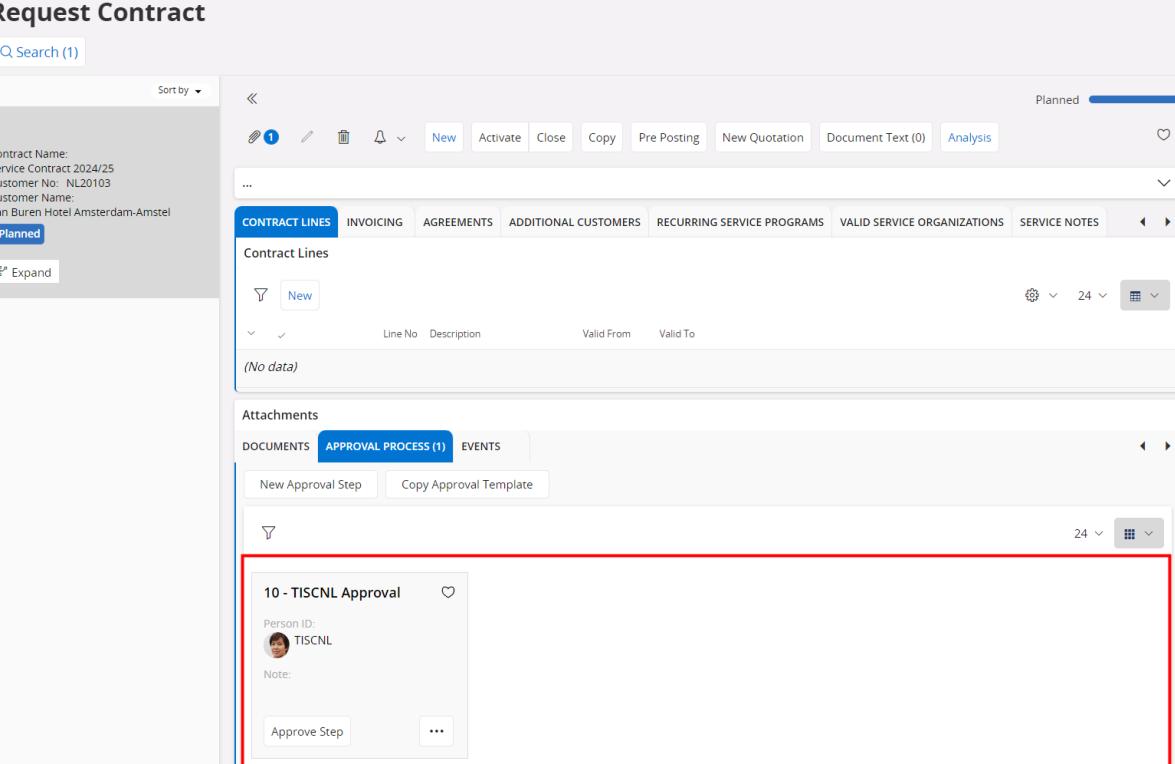
This screenshot shows the second step of the 'Projection Action Configuration' wizard. It has three tabs at the top: 'Projection General Info', 'Action Details' (selected), and 'Enable Projection Action'. Under 'Action Details', there's a 'Choose Projection Action Type' section with 'Action Type' set to 'CALL' and 'Call Name' set to 'ScServiceContract_Activate():Void'. Below that is an 'Execution' section where 'Type' is 'Validation' and 'Timing' is 'After'. At the bottom are buttons for 'Previous', 'Next', 'Finish' (highlighted in blue), and 'Cancel'.

Select **Next**, **Enable Projection Action** and **Finish**.

Step 6 – Test the Scenario

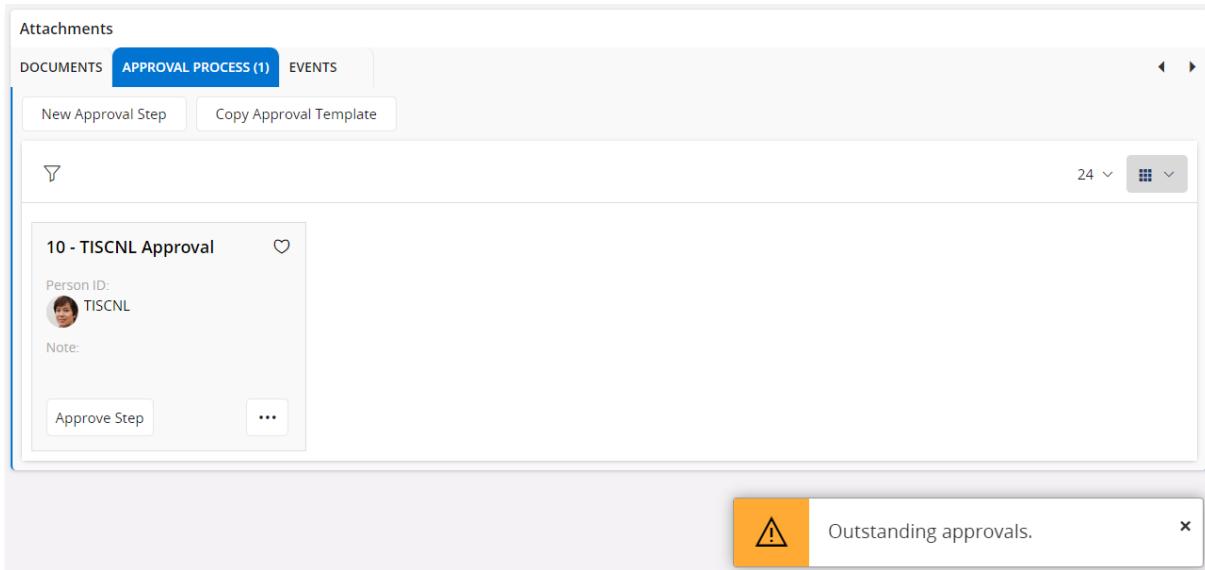
Create a new Request Contract. The Approval Process is automatically associated.

Request Contract



This screenshot shows the 'Request Contract' management screen. On the left, there's a sidebar with a list of contracts, one of which is selected and highlighted with a red border. The main area shows a table for 'CONTRACT LINES' with columns for Line No, Description, Valid From, and Valid To. Below the table is an 'Attachments' section with tabs for 'DOCUMENTS', 'APPROVAL PROCESS (1)' (which is selected and highlighted in blue), and 'EVENTS'. A red box highlights the first approval step in the 'APPROVAL PROCESS' tab, which is titled '10 - TISCNL Approval' and assigned to a user named 'TISCNL'. There are buttons for 'Approve Step' and '...'. At the bottom right of the approval step card, there's a small grid icon with the number '24'.

Activate the contract.

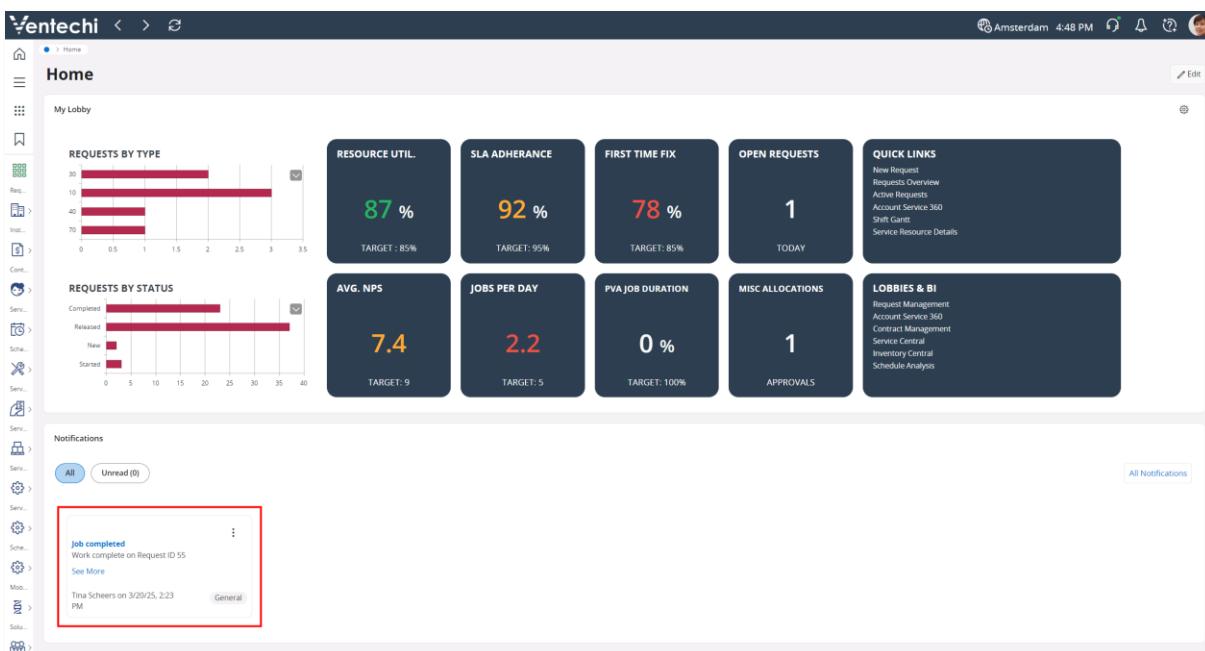


The screenshot shows the IFS Cloud interface with the 'APPROVAL PROCESS (1)' tab selected. A tooltip at the bottom right says 'Outstanding approvals.' with a warning icon.

Approve the step and **Activate** the contract again.

Custom Streams Notifications (📝)

With the new IFS Cloud home page introduced in 24R2, Streams notifications can be made available in a prominent place.



The screenshot shows the IFS Cloud Home page with various performance metrics and a 'Notifications' section. A specific notification about a job completion is highlighted with a red box.

Here is a configuration example that explains how to create notifications when a Request is completed. Navigate to  **Solution Manager>Configuration>Events>Custom Event** and create a new Custom Event.

Solution Manager > Configuration > Events > Custom Event

Custom Event

Search (1)

Sort by: C_SRV_REQ_RELEASED ▾ 1 of 1

New Custom Event | New Event Action | Show Action | Application Configuration Package | Export Custom Event

General

Event ID	C_SRV_REQ_RELEASED	Description	Service Request Status Update	Event Enabled <input checked="" type="checkbox"/>
----------	--------------------	-------------	-------------------------------	---

Object Details

Entity	SrvRequest	Table	SRV_REQUEST_TAB
--------	------------	-------	-----------------

Fire When:

New objects are created	<input type="checkbox"/>	Objects are removed	<input type="checkbox"/>
Objects are changed	<input checked="" type="checkbox"/>	Only when these attributes are changed	ROWSTATE

Select attributes available when creating event actions

Attribute	New Value	Old Value	Data Type
REQ_ID	Yes	No	STRING
DESCRIPTION	Yes	No	STRING
ROWSTATE	Yes	No	STRING

This event will be triggered upon updates of the SrvRequest entity but only upon status changes (ROWSTATE updates). The fields REQ_ID, DESCRIPTION, and ROWSTATE will be available for downstream logic. Select **New Event Action** to create an action that should be triggered upon the newly created event.

Solution Manager > Configuration > Events > Event Action

Event Action Details

Search (1)

Sort by: 0 ▾ 1 of 1

Application Configuration Package

Event Action Type Group

Event Action Type	Streams Message	Perform upon Event	C_SRV_REQ_RELEASED	Action Description * <input checked="" type="checkbox"/> Service Request Completed
-------------------	-----------------	--------------------	--------------------	--

Enable Event Action

Conditions

Name	Condition	Value
NEW:DESCRIPTION	=	
NEW:REQ_ID	=	
NEW:ROWSTATE	=	Completed

Streams Message Settings

From User:	To User:
TISCNL	TISCNL
Subject:	
Job completed	
Message:	Work complete on Request ID &NEW:REQ_ID
URL:	page/Request/RequestManagementPage:\$filter=ReqId eq '/&NEW:REQ_ID'

Notice under **Conditions** that the action is only executed when Rowstate was updated to "Completed". For illustration purposes the message's From and To User are hard-coded.

Make sure that Event Action and Event are enabled.

Object Properties (📝)

Application Base Setup>System Setup>System Definitions>Object Properties

Object Properties are system parameters that affect the behavior of IFS Cloud.

Object LU	Object Key	Property Name	Explanation
CancelTaskCause	*	USE_CNCL_CAUSE_ACCSS	Used to control user access to cancellation causes. When set to TRUE, user access is required to cancel work orders, work tasks, work assignments, or work task steps, meaning users can only use cancellation causes assigned to them and valid for the type of record they are canceling. If set to FALSE, users can view all cancellation causes without restrictions.
Maintenance Configuration	*	BND_TASK_COST_DIST	Default value for Bundle Task Cost Distribution. See Report Time .
Maintenance Configuration	*	AUTO_AUTH_SIGN	Automatic authorization of time. See Request Invoicing/Closing .
Maintenance Configuration	*	AUTO_AUTH_SIGN_EXP	Automatic authorization of manual expense. See Request Invoicing/Closing .
Maintenance Configuration	*	AUTO_AUTH_SIGN_EXT	Automatic authorization of manual external. See Request Invoicing/Closing .
Maintenance Configuration	*	AUTO_AUTH_SIGN_TOOL	Automatic authorization of tool time. See Request Invoicing/Closing .
Maintenance Configuration	*	DEF_AUTH_SIGN	If any of the AUTO_AUTH_SIGN parameters is set to Yes, this value (user) will be used for the automatic authorization. See Request Invoicing/Closing .
MapPosition	*	GEOCODING_INT	Decides whether newly created location addresses are automatically geocoded. See Locations .
MapPosition	*	MIN_GEOCODING_SCORE	A percentage between 0% and 100% used to highlight the Location Addresses below the acceptable Minimum Geocoding Score. See Geocoding Quality .
MapPosition	*	AUTOMATIC_GEOCODING	This setting defines whether updating an address creates a new map position, overwrites the existing, or does nothing. See Geocoding on Address Updates .

Integration APIs

Request Management Integration APIs

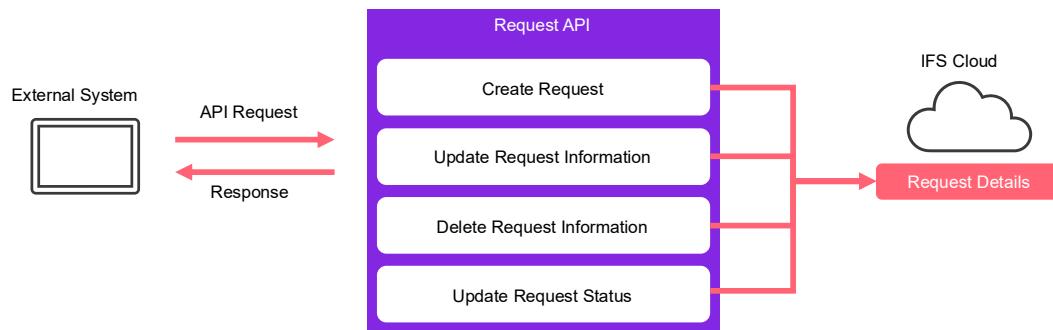
Request API

The **RequestServices** integration API can be used for the creation, modification, deletion, and retrieval of Requests and Request Work Tasks in IFS. It supports both the creation of a basic Service Request, with the ability to later add or update related details, as well as the creation of a complete request including child entities (such as Request SLAs, Contacts, Service Notes, and Access Groups) in a single API call. Additionally, the API endpoints make it possible to update the Status of a Request.

Requests can be created in either the "New" or "Released" status, and the API supports the use of external identifiers for creating, updating, and retrieving requests. This approach simplifies the process for external systems by enabling them to interact with the Service Request using an External Request ID, eliminating the need to reference IFS internal keys.

If only Request details are provided, the API will generate Work Tasks based on any standard tasks associated with the service. If both Request and Task details are provided, the API will create both the Request and its tasks in a single operation. This ensures flexibility and ease of integration with external systems.

Request Management Integration APIs: Request API Concept



This purpose-built integration API makes it easy and efficient for customers to connect their systems with IFS Cloud Service Management functionality by streamlining the creation, updating, and management of Requests.

Solution Manager > Integration > API Explorer

API Explorer

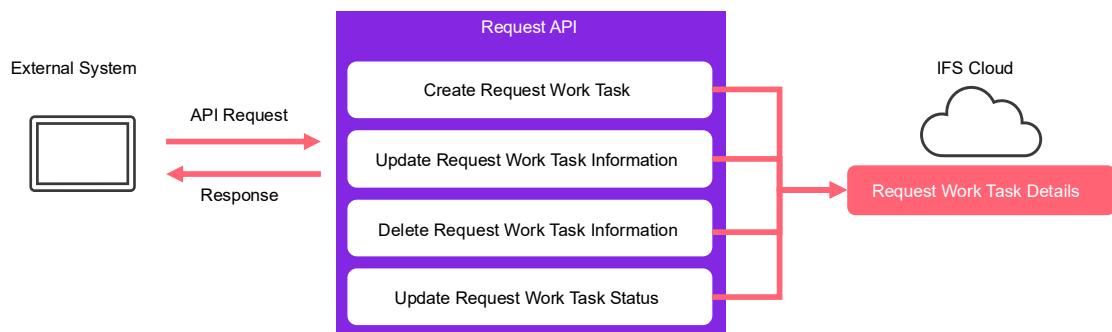
Search

API Name	Description	Component	Categories	Layer	API Class	Active	Deprecated
RequestServices	Importing Request data from an external source.	REQMGT	Integration	Core	Standard	Yes	No

Request Work Task API

The **ReqWorkTaskServices** integration API is designed for creating and managing the lifecycle of Request Work Tasks in IFS Cloud. This API can be used for adding a Request Work Task to an existing Request in IFS Cloud. It is also possible to do modification, deletion, and retrieval of Request Work Tasks and related information such as Resources, Work Steps, Materials, Returns, Service Notes, Contacts, and SLAs. Additionally, the API endpoints make it possible to update the Status of a Request Work Task, Work Steps and Work Assignments.

Request Management Integration APIs - Request Work Task API Concept



External applications can utilize this API to manage Request Work Task data. It supports both the creation of a basic Request Work Task, with the ability to later add or update related details, as well as the creation of a complete Request Work Task, including child entities, in a single API call.

The API supports the use of external identifiers for creating, updating, and retrieving Request Work Tasks. This approach simplifies the process for external systems by enabling them to interact with the Request Work Tasks using an External Request Work Task ID, eliminating the need to reference IFS internal keys.

Solution Manager > Integration > API Explorer

API Explorer

Search

API Name	Description	Component	Categories	Layer	API Class	Active	Deprecated
ReqWorkTaskServ...	External Request Work Task Services	REQMGT	Integration	Core	Standard	Yes	No

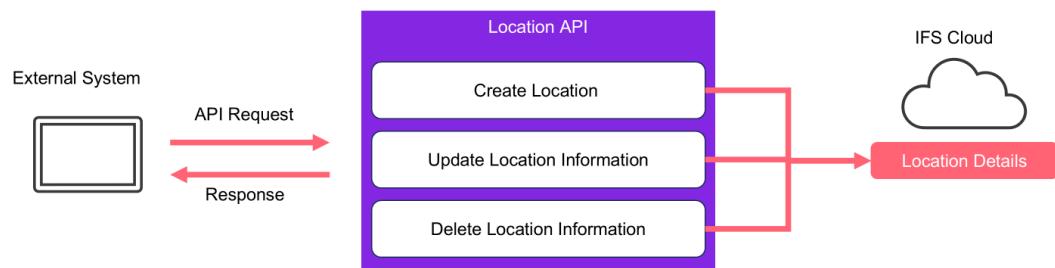
Location API

The **LocationServices** integration API enables comprehensive management of location data, including the creation, modification, retrieval, and deletion of locations. The API also handles associated attributes such as map positions, addresses, skills, service notes, scheduling details, etc.

External applications can utilize this API to manage Location data. The API supports the use of external identifiers for creating, updating, and retrieving Locations. This approach simplifies the process for external systems by enabling them to interact with the Locations using an External Location ID, eliminating the need to reference IFS internal keys.

With built-in validation and exception handling, the Location API ensures accurate geocoding, reverse geocoding, and mapping and easy-to-understand validations and error/exception handling.

Service Management Integration APIs - Location API Concept



This purpose-built integration API can be used to add new Locations to IFS Cloud and to update or delete Location details. It supports the addition, updating, or deletion of Location data such as Addresses, Service Notes, Skills, and Scheduling information.

Solution Manager > Integration > API Explorer

API Explorer

Search

API Name	Description	Component	Categories	Layer	API Class	Active	Deprecated
LocationServices	External Location Services.	LOC	Integration	Core	Standard	Yes	No

Map Position API

The **MapPositionServices** integration API enables users/systems to create, modify, and delete Map Positions and link them to an existing object (object connection) if required. This is useful for customers who use their own geocoding services or where the latitude/longitude coordinates are provided by a third party. With built-in validation and exception handling, the Map Position API ensures accurate mapping and provides easy-to-understand validations and error/ exception handling.

Service Management Integration APIs - Map Position API Concept



This purpose-built integration API can be used to add or delete a Map Position in IFS Cloud.

Solution Manager > Integration > API Explorer

API Explorer

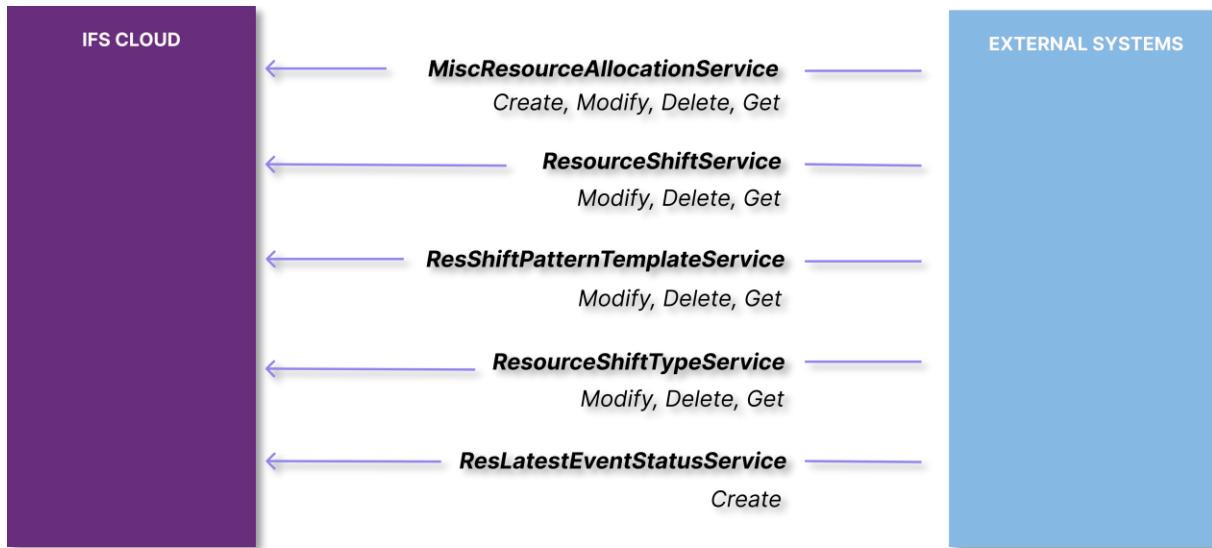
Search

API Name	Description	Component	Categories	Layer	API Class	Active	Deprecated
MapPositionServices	External Map Position Services	LOC	Integration	Core	Standard	Yes	No

Resource Management Integration APIs

Overview and unique identifiers

All Resource Management Integration APIs support **Res_Seq** or **Resource ID+Resource Type** as the unique identifier. For an API call to an entity with nested attributes, CRUD operations on child data are handled through an Update call on the parent entity. Similarly, for Delete calls, a delete action on a parent entity will delete all child data for that parent.



Miscellaneous Resource Allocations API

Resource Management Integration APIs - MRAs Concept



The **MiscResourceAllocationService** integration API can be used to create, modify, delete, and retrieve MRAs (Miscellaneous Resource Allocations) in IFS Cloud. It supports new functionality to align MRAs to the resource's schedule. It can also create and update the MRA status in one API call e.g., create an Approved MRA record.

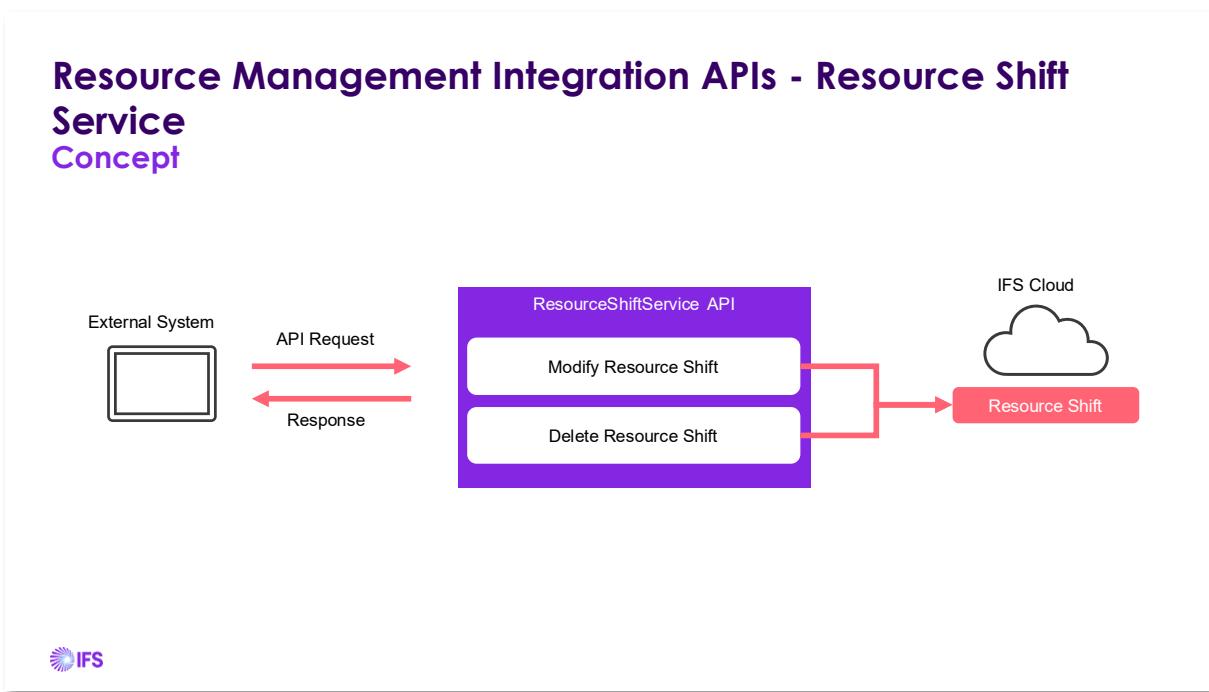
This integration API can be used to create, modify, delete and retrieve miscellaneous resource allocation records for existing resources.



The screenshot shows the IFS API Explorer interface. At the top, there is a breadcrumb navigation: Solution Manager > Integration > API Explorer. Below it, a search bar is labeled "API Explorer" and "Search". A table lists one API entry:

API Name	Description	Component	Categories	Layer	API Class	Active	Deprecated
MiscResourceAllocationService	Importing Misc Resource Allocation data from an external source.	GENRES	Integration	Core	Standard	Yes	No

Resource Shift API



The **ResourceShiftService** integration API enables the creation, modification, removal, and retrieval of shifts for existing resources.

- Regular and/or On Call shifts can be defined, modified or deleted on a shift-by-shift basis or for an entire shift schedule.
- Breaks can be defined, modified or removed only for regular (non-on-call) shifts.
- Shift scheduling attributes that are present in the Resource Attribute Manager can be added, modified or removed from the shift.
- Parent (shift) and child (shift attributes) data can be updated in a single API call.

Solution Manager > Integration > API Explorer

API Explorer

Search

API Name	Description	Component	Categories	Layer	API Class	Active	Deprecated
ResourceShiftService	Resource Shift Service	GENRES	Integration	Core	Standard	Yes	No

Resource Shift Type API

Resource Management Integration APIs - Resource Shift Type Service Concept

```

graph LR
    ES[External System] -- "API Request" --> RSTSAPI[ResourceShiftTypeService API]
    RSTSAPI -- "Response" --> ES
    RSTSAPI --> RSTS[Resource Shift Type Service]
    RSTS --- IFSCloud[IFS Cloud]
  
```

The diagram illustrates the interaction between an External System and the ResourceShiftTypeService API. The External System sends an API Request to the ResourceShiftTypeService API. The API then returns a Response to the External System. The ResourceShiftTypeService API also interacts with the Resource Shift Type Service, which is part of the IFS Cloud.

IFS

The **ResourceShiftTypeService** integration API allows the creation, modification, and deletion of Resource Shift Types that can later be used when defining Resource Shift Pattern Templates.

- Regular and/or On Call shift types can be defined
- Breaks can be defined, modified, or removed only for regular (non-on-call) shifts.
- Shift scheduling attributes that are present in the Resource Attribute Manager can be added, modified or removed from the shift.

Solution Manager > Integration > API Explorer

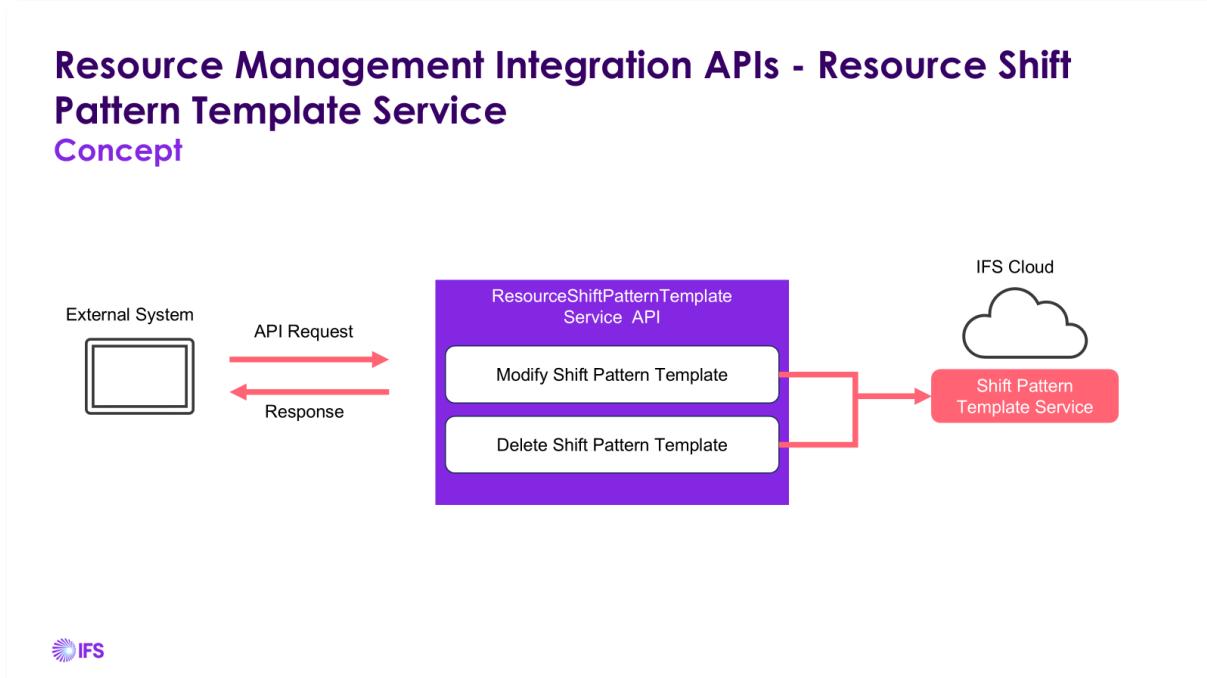
API Explorer

Search

Specifications Documentation

API Name	Description	Component	Categories	Layer	API Class	Active	Deprecated
ResourceShiftTypeService	Resource Shift Type Service	GENRES	Integration	Core	Standard	Yes	No

Resource Shift Pattern Template API

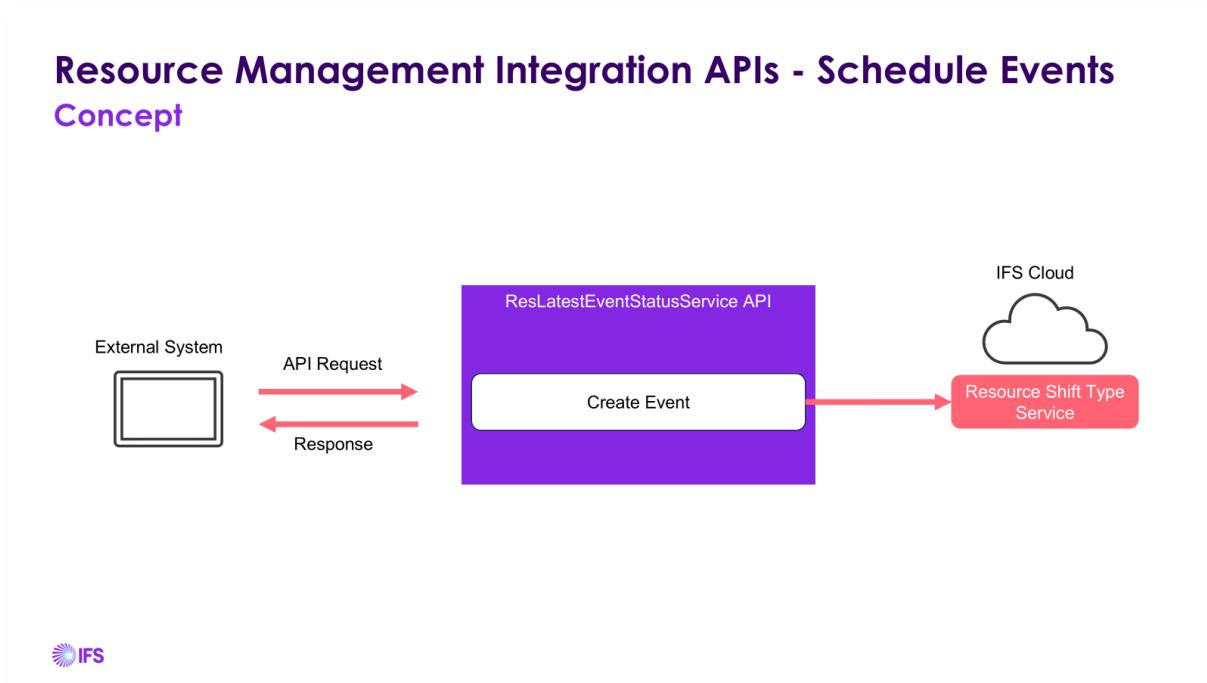


The **ResShiftPatternTemplateService** integration API provides the ability to create, modify, delete, and retrieve shift pattern template information (including breaks and attributes). A shift pattern template is defined by its cycle, shift types, and the connected resources.

API Explorer

API Name	Description	Component	Categories	Layer	API Class	Active	Deprecated
ResShiftPatternTemplateService	Res Shift Pattern Template Service	GENRES	Integration	Core	Standard	Yes	No

Schedule Events API



The **ResLatestEventStatusService** integration API can be used to update the resource latest event status for existing resources. Events include:

- Set Attention On/Off
- Set Break On/Off
- Resource Login/Logoff
- Set Resource Location

API Explorer								
API Name		Description	Component	Categories	Layer	API Class	Active	Deprecated
ResLatestEventStatusService		Importing Res Latest Event Status d...	GENRES	Integration	Core	Standard	Yes	No

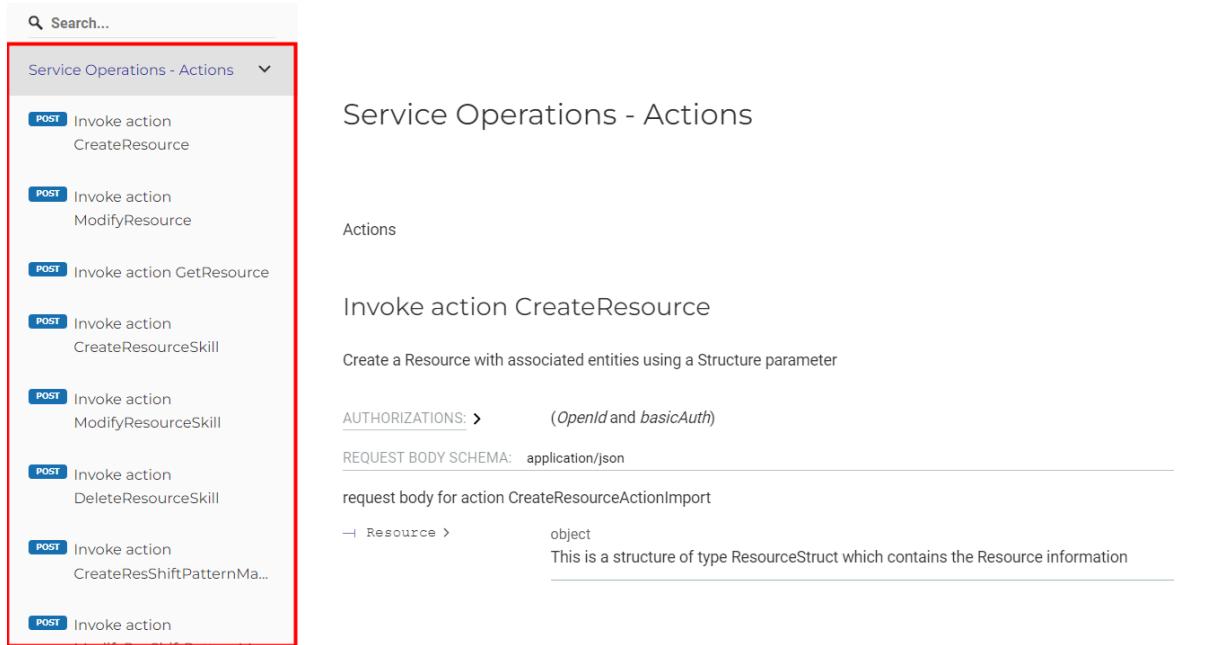
Resource API

The **ResourceService** integration API can be used for the creation of Resources of type structure, group and individual, individual types can be Person, Crew and Tool.

API Explorer								
API Name		Description	Component	Categories	Layer	API Class	Active	Deprecated
ResourceService		Importing Resource data from an external source.	GENRES	Integration	Core	Standard	Yes	No

The Integration API can be used to create, update, and delete:

- Resource details including basic scheduling and mobile information,
- Skills,
- Crew Members and Crew Leaders,
- Resource attributes.

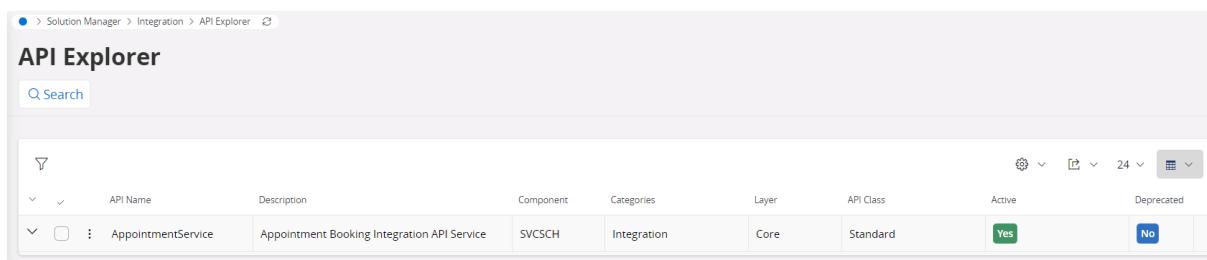


The screenshot shows the 'Service Operations - Actions' API Explorer. On the left, a sidebar lists various actions: CreateResource, ModifyResource, GetResource, CreateResourceSkill, ModifyResourceSkill, DeleteResourceSkill, CreateResShiftPatternMa..., and another partially visible action. The main panel displays the details for the 'CreateResource' action. It includes a brief description: 'Create a Resource with associated entities using a Structure parameter'. Below this, there are sections for 'AUTHORIZATIONS' (OpenId and basicAuth), 'REQUEST BODY SCHEMA' (application/json), and a detailed description of the request body for 'CreateResourceActionImport'.

Appointment Booking Integration API

Appointment API

The **AppointmentService** integration API can be used to request appointment slots, book appointments, cancel appointments and decline appointments for tasks.



The screenshot shows the 'API Explorer' interface. At the top, a navigation bar indicates the user is in 'Solution Manager > Integration > API Explorer'. The main area is titled 'API Explorer' and contains a search bar labeled 'Search'. Below the search bar is a table with columns: API Name, Description, Component, Categories, Layer, API Class, Active, and Deprecated. A single row is visible for the 'AppointmentService', which is described as the 'Appointment Booking Integration API Service'. The 'Active' column shows a green 'Yes' button, and the 'Deprecated' column shows a grey 'No' button.

Service Contractor Integration APIs (25R1★)

Contractor Management Integration APIs (25R1★)

Subcontractors that manage their awarded work in separate systems need a method to accept or reject tasks, receive updates, and report on progress through integration. They also require endpoints to ensure that all base parameters, such as resourcing/skills, capacity, and contact information, are up to date.

Contractor Management: Integration APIs Concept

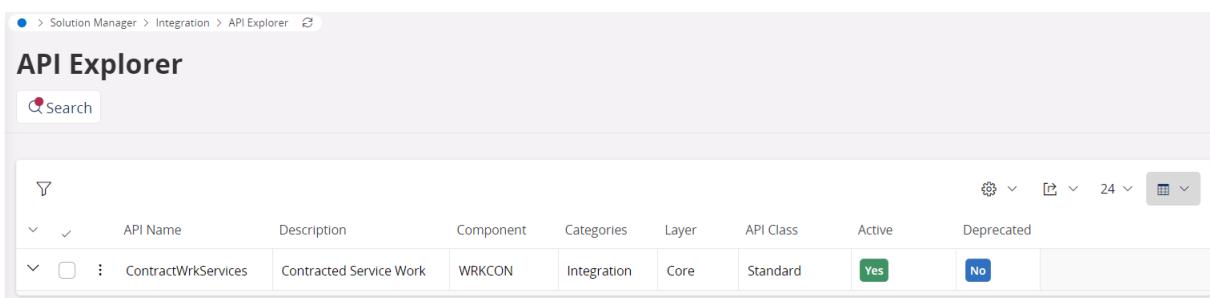
Service Contractor API



 IFS

The **ContractWrkServices** integration API allows an external system:

- to get information on subcontracted resources in IFS Cloud
 - Get resource companies
 - Get resource regions
 - Get resource shifts
 - Get resource attachments
- to add, delete, and update Service Contractor resource skills
- to get information on the assigned Contractor Orders and Accept/Reject them with a note.



The screenshot shows the API Explorer interface with the following details:

- Path: Solution Manager > Integration > API Explorer
- Section: API Explorer
- Search Bar: Search
- Table Headers: API Name, Description, Component, Categories, Layer, API Class, Active, Deprecated
- Table Data: ContractWrkServices (Contracted Service Work, WRKCON, Integration, Core, Standard, Yes, No)

Contractor Agreement Integration APIs (25R1★)

The Contractor Agreements Integration API makes it easy for contractors to connect their systems with the IFS Cloud Contractor Management functionality. The API streamlines the creation, updating, and management of Contractor Agreements.

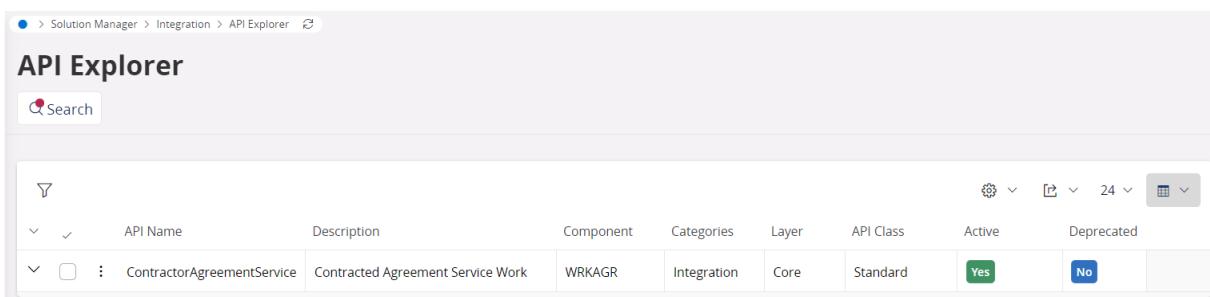
Contractor Management: Integration APIs Concept

Contractor Agreements API



The **ContractorAgreementService** Integration API allows an external system:

- to create Contractor Agreements in IFS Cloud
- to view or update Contractor Agreement and Agreement line details and handle progress through the status handling
- to retrieve information on the Services covered under the Contractor Agreement, and get information around the Cost Details.



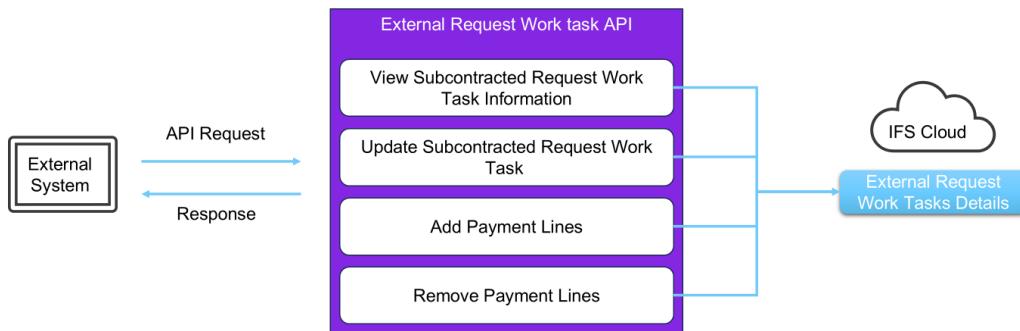
API Name	Description	Component	Categories	Layer	API Class	Active	Deprecated
ContractorAgreementService	Contracted Agreement Service Work	WRKAGR	Integration	Core	Standard	Yes	No

External Request Work Task API (25R1★)

The External Request Work Task Services API enables Service Contractors using external systems to view the work tasks assigned to them in detail and report the work done through existing or additional payment lines.

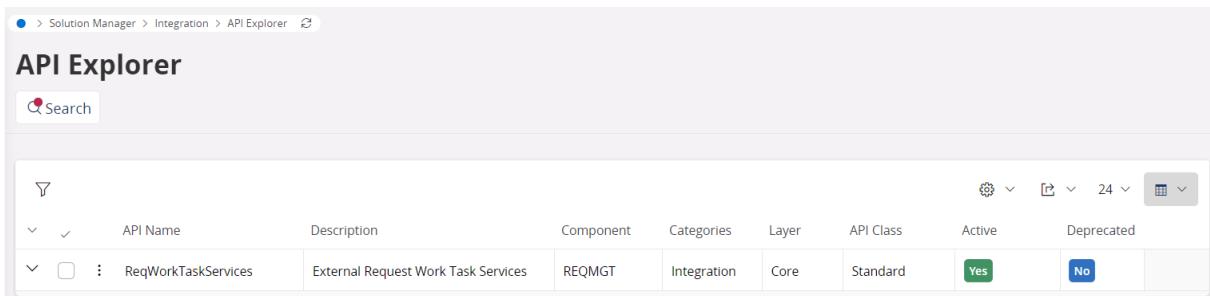
Contractor Management: Integration APIs Concept

External Request Work Task API



The **ReqWorkTaskServices** Integration API allows an external system to

- get details of subcontracted Request Work Tasks in IFS Cloud to:
 - view address and position of the Request Work Task,
 - manage Work Steps and update status,
 - view SLA commitments,
 - view materials needed,
 - view resource requirements and skills,
 - view attachments.
- to view, add or remove Request Work Tasks Payment Lines so that contractors can view and
 - if needed - request additional funds required to perform their assigned work
- to set the resolution text for the Request Work Task



The screenshot shows the API Explorer interface with the following details:

- Solution Manager > Integration > API Explorer
- API Explorer** title bar
- Search bar
- Table header: API Name, Description, Component, Categories, Layer, API Class, Active, Deprecated
- Table data row: ReqWorkTaskServices, External Request Work Task Services, REQMGT, Integration, Core, Standard, Yes, No

Appendix

BPMN of the Approval BPA Workflow

```

<?xml version="1.0" encoding="UTF-8"?>
<bpmn:definitions
  xmlns:bpmn="http://www.omg.org/spec/BPMN/20100524/MODEL"
  xmlns:bpmdi="http://www.omg.org/spec/BPMN/20100524/DI"
  xmlns:dc="http://www.omg.org/spec/DD/20100524/DC"
  xmlns:di="http://www.omg.org/spec/DD/20100524/DI"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:camunda="http://camunda.org/schema/1.0/bpmn"
  id="sample-diagram"
  targetNamespace="http://bpmn.io/schema/bpmn">
  <bpmn:process id="ReqConApproval" isExecutable="true">
    <bpmn:startEvent id="StartEvent_1">
      <bpmn:outgoing>Flow_1cve4nz</bpmn:outgoing>
    </bpmn:startEvent>
    <bpmn:endEvent id="Event_0js99wb">
      <bpmn:incoming>Flow_0a6pdtc</bpmn:incoming>
      <bpmn:incoming>Flow_06blb1o</bpmn:incoming>
    </bpmn:endEvent>
    <bpmn:sequenceFlow id="Flow_1cve4nz" sourceRef="StartEvent_1" targetRef="Gateway_0ya6chl" />
    <bpmn:exclusiveGateway id="Gateway_0ya6chl" default="Flow_02tydi5">
      <bpmn:incoming>Flow_1cve4nz</bpmn:incoming>
      <bpmn:outgoing>Flow_0x04umd</bpmn:outgoing>
      <bpmn:outgoing>Flow_02tydi5</bpmn:outgoing>
    </bpmn:exclusiveGateway>
    <bpmn:sequenceFlow id="Flow_0x04umd" name="Is New" sourceRef="Gateway_0ya6chl" targetRef="Activity_1czjaqj">
      <bpmn:conditionExpression
        language="JavaScript">execution.getVariable("ifsBpaCurrentProjectionName") == "CreateServiceContractHandling" </bpmn:conditionExpression>
    </bpmn:sequenceFlow>
    <bpmn:sequenceFlow id="Flow_02tydi5" name="Is Activate" sourceRef="Gateway_0ya6chl" targetRef="Activity_1vzkost" />
    <bpmn:sequenceFlow id="Flow_00iwu3c" sourceRef="Activity_1vzkost" targetRef="Gateway_0ysxhh5" />
    <bpmn:sequenceFlow id="Flow_0a6pdtc" sourceRef="Activity_1czjaqj" targetRef="Event_0js99wb" />
    <bpmn:serviceTask id="Activity_1czjaqj" name="Copy Approval Template" camunda:class="com.ifsworld.fnd.bpa.IfsProjectionDelegate">
      <bpmn:extensionElements>
        <camunda:inputOutput>
          <camunda:inputParameter name="ifsBpaProjectionETagVariableName">ETag</camunda:inputParameter>
          <camunda:inputParameter name="ifsBpaProjectionType">Standard</camunda:inputParameter>
          <camunda:inputParameter name="ifsBpaProjectionAction">CALL</camunda:inputParameter>
          <camunda:inputParameter name="ifsBpaProjectionName">ApprovalRoutingAttachmentHandling</camunda:inputParameter>
          <camunda:inputParameter name="ifsBpaProjectionCallSignature">CopyAppProfileAndCheckStepsValues(SelectionKeyRef,TypeSelection,ProfileId,luName):CopyAppProfileAndCheckSteps</camunda:inputParameter>
          <camunda:inputParameter name="ifsBpaCallReturnValueName">CopyAppProfileAndCheckStepsValues</camunda:inputParameter>
          <camunda:inputParameter name="ifsBpaProjectionParameters">
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              <camunda:entry key="TypeSelection">APPROVAL ROUTING</camunda:entry>
              <camunda:entry key="ProfileId">REQCON1</camunda:entry>
              <camunda:entry key="LuName">ScServiceContract</camunda:entry>
            </camunda:map>
          </camunda:inputParameter>
        </camunda:inputOutput>
      </bpmn:extensionElements>
      <bpmn:incoming>Flow_0x04umd</bpmn:incoming>
      <bpmn:outgoing>Flow_0a6pdtc</bpmn:outgoing>
    </bpmn:serviceTask>
    <bpmn:exclusiveGateway id="Gateway_0nx864v" default="Flow_06blb1o">
      <bpmn:incoming>Flow_1h5b75m</bpmn:incoming>
      <bpmn:outgoing>Flow_104p8j3</bpmn:outgoing>
      <bpmn:outgoing>Flow_06blb1o</bpmn:outgoing>
    </bpmn:exclusiveGateway>
  </bpmn:process>

```

```

        </bpmn:exclusiveGateway>
        <bpmn:sequenceFlow id="Flow_104p8j3" sourceRef="Gateway_0nx864v" targetRef="Event_03ff2te">
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        </bpmn:sequenceFlow>
        <bpmn:serviceTask id="Activity_1vzkost" name="Read" Approval="Approval" Routing="Routing" camunda:class="com.ifsworld.fnd.bpa.IfsProjectionDelegate">
            <bpmn:extensionElements>
                <camunda:inputOutput>
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                    <camunda:inputParameter name="ifsBpaProjectionETagVariableName">ETag</camunda:inputParameter>
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                    <camunda:inputParameter name="ifsBpaProjectionName">ApprovalRoutingAttachmentHandling</camunda:inputParameter>
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                    <camunda:inputParameter name="ifsBpaProjectionParameters">
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                    </camunda:inputParameter>
                    <camunda:inputParameter name="ifsBpaFilterQuery">(lu_name = 'ScServiceContract' AND key_ref = 'CONTRACT_ID'||${ContractId}||'^')</camunda:inputParameter>
                    <camunda:inputParameter name="ifsBpaProjectionErrorLogVariableName">ApprovalRoutings_Log</camunda:inputParameter>
                    <camunda:inputParameter name="ifsBpaProjectionIsErrorLog">true</camunda:inputParameter>
                </camunda:inputOutput>
            </bpmn:extensionElements>
            <bpmn:incoming>Flow_02tydi5</bpmn:incoming>
            <bpmn:outgoing>Flow_00iwu3c</bpmn:outgoing>
        </bpmn:serviceTask>
        <bpmn:endEvent id="Event_03ff2te">
            <bpmn:extensionElements>
                <camunda:inputOutput>
                    <camunda:inputParameter name="ifsBpaValidationErrorMessage">
                        <camunda:map>
                            <camunda:entry key="en">Outstanding approvals.</camunda:entry>
                        </camunda:map>
                    </camunda:inputParameter>
                </camunda:inputOutput>
                <camunda:executionListener class="com.ifsworld.fnd.bpa.process.validation.IfsBpaFailureEndEventListener" event="end" />
            </bpmn:extensionElements>
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            <bpmn:terminateEventDefinition id="TerminateEventDefinition_0aei19b" />
        </bpmn:endEvent>
        <bpmn:endEvent id="Event_1ty49rv">
            <bpmn:extensionElements>
                <camunda:inputOutput>
                    <camunda:inputParameter name="ifsBpaValidationErrorMessage">
                        <camunda:map>
                            <camunda:entry key="en">No approval routings</camunda:entry>
                        </camunda:map>
                    </camunda:inputParameter>
                </camunda:inputOutput>
                <camunda:executionListener class="com.ifsworld.fnd.bpa.process.validation.IfsBpaFailureEndEventListener" event="end" />
            </bpmn:extensionElements>
            <bpmn:incoming>Flow_00hbbco</bpmn:incoming>
            <bpmn:terminateEventDefinition id="TerminateEventDefinition_02265a4" />
        </bpmn:endEvent>
        <bpmn:exclusiveGateway id="Gateway_0ysxhh5" default="Flow_1h5b75m">
            <bpmn:incoming>Flow_00iwu3c</bpmn:incoming>
            <bpmn:outgoing>Flow_1h5b75m</bpmn:outgoing>
            <bpmn:outgoing>Flow_00hbbco</bpmn:outgoing>
        </bpmn:exclusiveGateway>
        <bpmn:sequenceFlow id="Flow_1h5b75m" sourceRef="Gateway_0ysxhh5" targetRef="Gateway_0nx864v" />
        <bpmn:sequenceFlow id="Flow_00hbbco" sourceRef="Gateway_0ysxhh5" targetRef="Event_1ty49rv" >
            <bpmn:conditionExpression language="JavaScript">execution.getVariable("ApprovalRoutings_Log") == "Resource" not found</bpmn:conditionExpression>
        </bpmn:sequenceFlow>
        <bpmn:sequenceFlow id="Flow_06blb1o" sourceRef="Gateway_0nx864v" targetRef="Event_0js99wb" />
        <bpmn:textAnnotation id="TextAnnotation_04heedp">

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<bpmn:text>No approval routings attached</bpmn:text>
</bpmn:textAnnotation>
<bpmn:association id="Association_1hi498c" sourceRef="Event_1ty49rv" targetRef="TextAnnotation_04heedp" />
<bpmn:textAnnotation id="TextAnnotation_0e240g4">
  <bpmn:text>Has Approval Routings not approved</bpmn:text>
</bpmn:textAnnotation>
<bpmn:association id="Association_0shz51f" sourceRef="Event_03ff2te" targetRef="TextAnnotation_0e240g4" />
</bpmn:process>
<bpmndi: BPMNDiagram id="BPMNDiagram_1">
  <bpmndi: BPMNPlane id="BPMNPlane_1" bpmnElement="ReqConApproval">
    <bpmndi: BPMNEdge id="Flow_06lblb1o_di" bpmnElement="Flow_06lblb1o">
      <di: waypoint x="1235" y="400" />
      <di: waypoint x="1350" y="400" />
      <di: waypoint x="1350" y="276" />
    </bpmndi: BPMNEdge>
    <bpmndi: BPMNEdge id="Flow_00hbbco_di" bpmnElement="Flow_00hbbco">
      <di: waypoint x="1018" y="425" />
      <di: waypoint x="1018" y="492" />
    </bpmndi: BPMNEdge>
    <bpmndi: BPMNEdge id="Flow_1h5b75m_di" bpmnElement="Flow_1h5b75m">
      <di: waypoint x="1043" y="400" />
      <di: waypoint x="1185" y="400" />
    </bpmndi: BPMNEdge>
    <bpmndi: BPMNEdge id="Flow_104p8j3_di" bpmnElement="Flow_104p8j3">
      <di: waypoint x="1210" y="425" />
      <di: waypoint x="1210" y="492" />
    </bpmndi: BPMNEdge>
    <bpmndi: BPMNEdge id="Flow_0a6pdtc_di" bpmnElement="Flow_0a6pdtc">
      <di: waypoint x="1150" y="258" />
      <di: waypoint x="1332" y="258" />
    </bpmndi: BPMNEdge>
    <bpmndi: BPMNEdge id="Flow_00iwu3c_di" bpmnElement="Flow_00iwu3c">
      <di: waypoint x="920" y="400" />
      <di: waypoint x="993" y="400" />
    </bpmndi: BPMNEdge>
    <bpmndi: BPMNEdge id="Flow_02tydi5_di" bpmnElement="Flow_02tydi5">
      <di: waypoint x="690" y="283" />
      <di: waypoint x="690" y="400" />
      <di: waypoint x="820" y="400" />
    <bpmndi: BPMNLabel>
      <dc: Bounds x="694" y="325" width="51" height="14" />
    </bpmndi: BPMNLabel>
  </bpmndi: BPMNEdge>
  <bpmndi: BPMNEdge id="Flow_0x04umd_di" bpmnElement="Flow_0x04umd">
    <di: waypoint x="715" y="258" />
    <di: waypoint x="1050" y="258" />
    <bpmndi: BPMNLabel>
      <dc: Bounds x="866" y="240" width="35" height="14" />
    </bpmndi: BPMNLabel>
  </bpmndi: BPMNEdge>
  <bpmndi: BPMNEdge id="Flow_1cve4nz_di" bpmnElement="Flow_1cve4nz">
    <di: waypoint x="588" y="258" />
    <di: waypoint x="665" y="258" />
  </bpmndi: BPMNEdge>
  <bpmndi: BPMNShape id="_BPMNShape_StartEvent_2" bpmnElement="StartEvent_1">
    <dc: Bounds x="552" y="240" width="36" height="36" />
  </bpmndi: BPMNShape>
  <bpmndi: BPMNShape id="Event_0js99wb_di" bpmnElement="Event_0js99wb">
    <dc: Bounds x="1332" y="240" width="36" height="36" />
  </bpmndi: BPMNShape>
  <bpmndi: BPMNShape id="Gateway_0ya6chl_di" bpmnElement="Gateway_0ya6chl" isMarkerVisible="true">
    <dc: Bounds x="665" y="233" width="50" height="50" />
  </bpmndi: BPMNShape>
  <bpmndi: BPMNShape id="Activity_1uy0cdd_di" bpmnElement="Activity_1czjaqj">
    <dc: Bounds x="1050" y="218" width="100" height="80" />
  </bpmndi: BPMNShape>
  <bpmndi: BPMNShape id="Gateway_0nx864v_di" bpmnElement="Gateway_0nx864v" isMarkerVisible="true">
    <dc: Bounds x="1185" y="375" width="50" height="50" />
  </bpmndi: BPMNShape>
  <bpmndi: BPMNShape id="Activity_1n42btd_di" bpmnElement="Activity_1vzkost">
    <dc: Bounds x="820" y="360" width="100" height="80" />
  </bpmndi: BPMNShape>

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<bpmndi:BPMMNShape id="Event_1ja8hg3_di" bpmnElement="Event_03ff2te">
<dc:Bounds x="1192" y="492" width="36" height="36" />
</bpmndi:BPMMNShape>
<bpmndi:BPMMNShape id="Event_0qrwz cq_di" bpmnElement="Event_1ty49rv">
<dc:Bounds x="1000" y="492" width="36" height="36" />
</bpmndi:BPMMNShape>
<bpmndi:BPMMNShape id="Gateway_0ysxhh5_di" bpmnElement="Gateway_0ysxhh5" isMarkerVisible="true">
<dc:Bounds x="993" y="375" width="50" height="50" />
</bpmndi:BPMMNShape>
<bpmndi:BPMMNShape id="TextAnnotation_04heedp_di" bpmnElement="TextAnnotation_04heedp">
<dc:Bounds x="960" y="560" width="100" height="55" />
</bpmndi:BPMMNShape>
<bpmndi:BPMMNShape id="TextAnnotation_0e240g4_di" bpmnElement="TextAnnotation_0e240g4">
<dc:Bounds x="1200" y="560" width="100" height="55" />
</bpmndi:BPMMNShape>
<bpmndi:BPMMNEdge id="Association_1hi498c_di" bpmnElement="Association_1hi498c">
<di:waypoint x="1016" y="528" />
<di:waypoint x="1012" y="560" />
</bpmndi:BPMMNEdge>
<bpmndi:BPMMNEdge id="Association_0shz51f_di" bpmnElement="Association_0shz51f">
<di:waypoint x="1219" y="525" />
<di:waypoint x="1241" y="560" />
</bpmndi:BPMMNEdge>
</bpmndi:BPMMNPlane>
</bpmndi:BPMMNDiagram>
</bpmn:definitions>
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