EPC Release Notes

11.5 — Last update: 2019/08/16

Interfacing Technologies Corporation

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Objective

The objective of EPC version 11.5 is to enhance the EPC Web App, and to increase security and compliance capabilities, while improving the general useability of the Web App.

The V11.5 release also delivers fixes to issues and enhancements related to the Web App. This document will communicate the new features and enhancements, resolved and known issues related to this release.

New Features and Enhancements

The following developments are included in version 11.5. These consist of significant changes including compliance and security enhancements to help your protect your information
The developments are categorized as follows:

- Multi-Factor Authentication
- Collaboration Enhancements
- Web Navigation Enhancements
- Web Editing Enhancements
- Export Enhancements
- Document Generation Enhancements
- Reporting Enhancements

Multi-Factor Authentication (Cognito)

Interfacing is proud to announce its new Multi-Factor Authentication (MFA) capabilities through the introduction of Cognito security parameters. This integration will allow you to enable MFA capabilites, levergae SMS or Random Code Generation for security and compliance, and enhance your user management capabilities.

The various components of the MFA Enhancements are as follows:

- 4.1.2 Cognito Login (Initial Login)
- 7.1.3 Cognito and Multi-Factor Authentication (Using MFA)
- 10.3.1.2 Add Cognito User (Creating MFA Users)
- 10.9.1.4 Enable Cognito (System Administration)

4.1.2 Cognito Login

Clients can opt to sign in using Cognito. Amazon Cognito provides authentication, authorization and user management for the EPC. This option must be enabled by System Administrators. Please contact your System Administrator for further details.
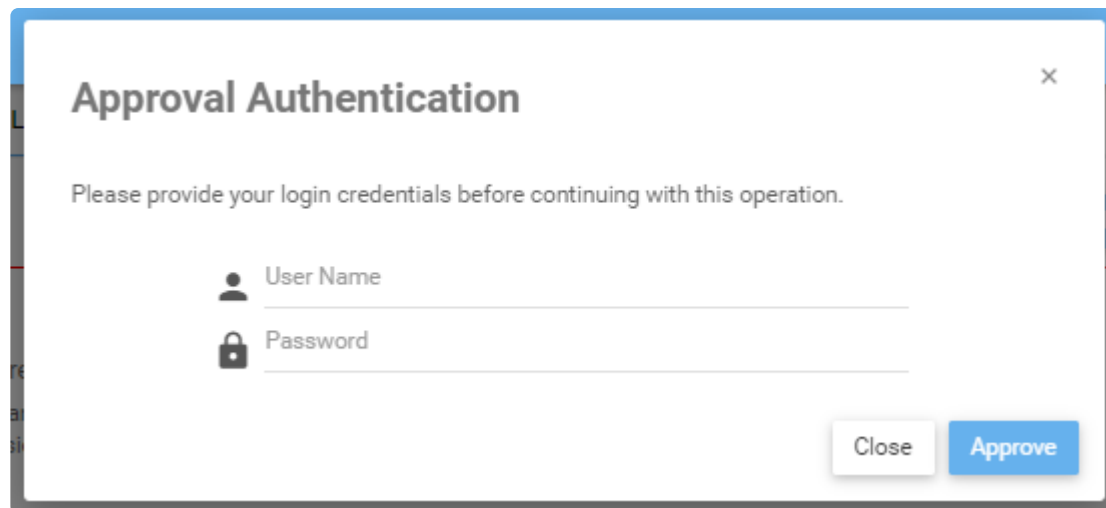
> ✳ If MFA is enabled for a user, an authentication code will be required when logging in.

7.1.3 Cognito and Multi-Factor Authentication (MFA)

Cognito

If Cognito is enabled, users will be asked to enter their credentials when approving or rejecting an approval cycle.

Multi-factor Authentication

If MFA is enabled for an user, following the Cognito authentication, the webapp will ask for the MFA code sent over SMS.

> ✳ Every time the MFA code is asked, a different code will be sent. If the window is closed, you will need to use the latest MFA code provided by Cognito.

Multi-factor Authentication

×

Please enter an MFA code to complete sign-in.

MFA Code: Confirm Code

Close   Approve

10.3.1.2 Add Cognito User

For general details on how to add a user, refer to the [Add User](#) section. The steps will be the same.

> ✳ Cognito must be enabled in the [Advanced settings](#).

Creating a Cognito User

When creating a Cognito User, there are a few rules to follow:

- The username must be a valid email address and should match with the Email field.
- Middle name is mandatory
- Phone number must valid

After the user is created, the user can use his/her credentials to log in. On the first login, the user will be asked to change their password.

After changing their password, the user will be able to log into the webapp.

Multi-Factor Authentication

To enable MFA when creating a user, change **MFA** to **on**. Conversely, to disable it, the value of **MFA** should be **off**.

> ✳ The MFA authentication code will be received by SMS. TOTP is currently not supported.

10.9.1.4 Enable Cognito

To enable Cognito login for EPC webapp users, follow these steps:

1. In the advanced tab, find the key labelled **PASSPORT_STRATEGY_TO_USE**.

2. Click on the edit icon to edit the value. Change the value to **COGNITO**.

| PASSPORT_STRATEGY_TO_USE | COGNITO | ✏ |

Collaboration Enhancements

In order to facilitate collaboration, Interfacing has enhanced its collaboration forum, providing your organization the tools it needs to effectively communicate and collaborate in your BPM initiatives.

You can now:

- Upload multiple documents to collaboration posts and replies
- Adjust the file size limitation (for system administrators)
- And we've extended Improvement Request security privileges, allowing more participants to approve or close improvement requests. This privilege has been extended to:
    ◦ Process Owners
    ◦ The creator of the improvement request, and
    ◦ System and environment administrators

- [4.12.6.1 Approve Improvement Request](#)
- [4.12.6.2 Assign IR Implementer](#)
- [4.12.6.3 Close Improvement Request](#)
- [4.12.6.4 New Revision Update to Review](#)

4.12.6.3 Close Improvement Request

At any point in time, Improvement Requests can be closed by users who are assigned as A (Accountable), Administrators and the creator of the IR.

4.12.6.4 New Revision Update to Review

IR implementers have now a way to be notified when a process to which they are assigned switches from a Published version to a Draft version. They will see a "New Revision Update to Review" box on the page of the object, which allows them to confirm that they have seen the change.
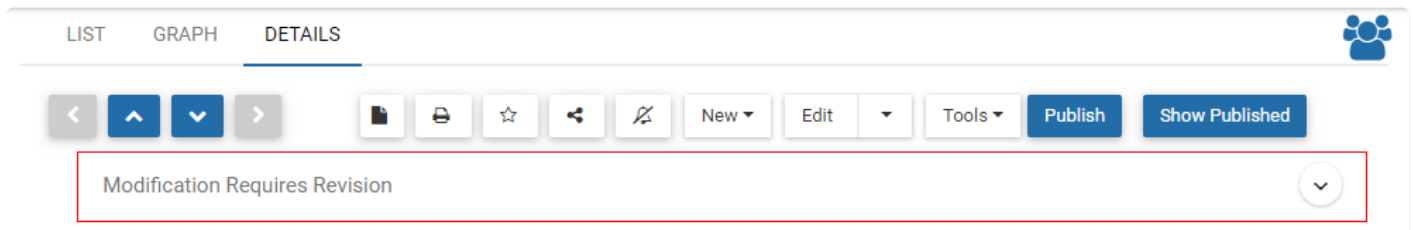
The box will appear if:

1. The user must be an IR Implementer on the object.
2. The object must change from a Published status to a Draft (In progress) status
3. The change must be done by a user that is not IR Implementer on the object.

Web Navigation Enhancements

The following enhancements for web navigation have been added in our 11.5 release:

- When clicking on an association on the details page of an object, users can now see the details of the association via a pop-up. Direct navigation to the object is possible via an icon.
- Users can highlight tasks in a process map for which they are RESPONSIBLE for.
- Users can highlight tasks depending on its automation level.
- We have renamed the auto-layout options for more clarity:
    - Always Disabled: Auto-layout is never run except when the auto-layout button is clicked
    - On Annotation: Auto-layout is run when expanding an icon to an annotation or when closing an annotation
    - Always Enabled: Auto-layout is automatically run when the process graph is loaded

- [4.4.4.2.3 Responsibilities](#)
- [4.4.3.2.5 Map Options Customization](#)

4.4.4.2.3 Responsibilities Preview

The Responsibilities Preview section displays de roles, resources and/or assets that are responsible for executing the particular process or flow object you are viewing. This provides additional details about any associated object that has been tied to the object using the RASCI-VS matrix.

To navigate directly to the object, click on the ⤤ icon.

Users can click on the specific item's name. You will be able to see the object's details in a popup. To navigate to the object's page, click on **Go to Object**
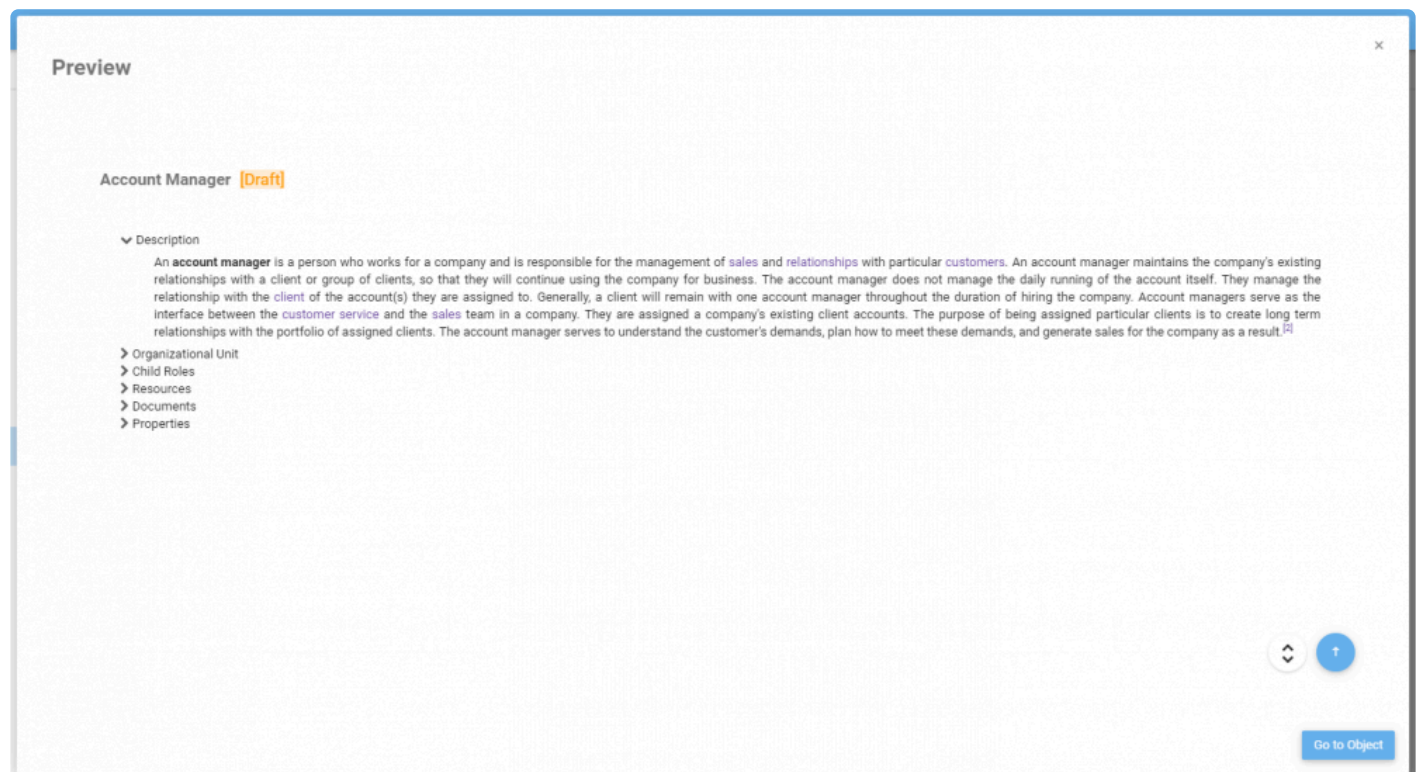
4.4.3.2.5 Map Options Customization

Users can customize Map Graphs to display specific items, allowing users to better view and analyze business processes. There are a variety of customizable features, which can be located in the options

section denoted by [⚙] icon.

Customization Options

N Icons & Annotations   −

Roles :	ICON ▼	Assets :	ICON ▼
Documents :	ICON ▼	Resources :	NONE ▼
Org Units :	ICON ▼	Risks :	ICON ▼
Rules :	ICON ▼	Controls :	ICON ▼
Objectives :	NONE ▼	Entities :	NONE ▼
Attributes :	NONE ▼	KCI :	NONE ▼
KPI :	ICON ▼	KRI :	NONE ▼
Materials :	ICON ▼	IPL :	ICON ▼
Categories :	NONE ▼	Annotation :	ICON ▼
Boundary Events :	NONE ▼	Description :	ICON ▼
Event & Gateway Name :	NONE ▼	Services :	NONE ▼

[Save as Environment Default]   [Reset to Default]   [Close]   [Save changes]

Item	Setting	Purpose
A	Display	Allows users to toggle between Graph formats (Graph View, Swimlanes, Matrix Swimlanes, Process Preference)
B	Swimlanes Matrix X	Select item to be feature on Swimlane X-axis (Matrix Swimlane only)
C	Swimlanes Matrix Y	Select item to be feature on Swimlane Y-axis
D	Expand IPL	Allow user to automatically enable IPLs expansion
E	Sub-Process Inline	Allows users to enable sub-processes expansion within a current process map

	Explosion	
F	Dedicated Pool	Allows users to isolate specific roles, resources, assets and org units into separate swimlanes
G	Highlight	Allow user to highlight specific paths (Critical Path, High Risk Path, Value Added, My Tasks, Manual vs. Automated)
H	Node Color	Allow users to enable or disable pre-set node colors
I	Performance Color	Allow users to enable or disable pre-set performance colors
J	Shape Type	Allow users to toggle between process viewing formats (BPMN 2.0, Simple BPMN, VSM, Modeler Default)
K	Group By	This section allows users to classify process and flow items into categories (e.g. Core Process vs. Support Process)
L	Auto Layout	Allow users to users to enable auto-layout on click, on annotation or have the setting constantly applied
M	RASCI-VS Filter	Allow users to prioritize items being displayed using the RASCI-VS matrix
N	Icons & Annotations	Allow users to dictate which items are displayed and how they are displayed (Icon, Annotation, None)

A. Display: The Display feature allows users to toggle between Graph, Swimlane and Matrix Swimlane views.

To use the Display option, please see the steps below:

1. Select "Options" icon

2. Navigate cursor to Display bar

3. The following drop-down menu will be generated

4. Select desired Graph format

5. Select the "Save Changes" button at the bottom right of the page

B. **Swimlanes Matrix X:** This feature allows users to set the X-axis for Matrix Swimlane Graphs.

✳   This feature will be locked until the Matrix Swimlane Display has been selected

To use the Swimlanes Matrix X option, please see the steps below:

1. Select "Options" icon ⚙

2. Navigate cursor to Display bar

3. The following drop-down menu will be generated

4. Select Matrix Swimlanes

5. Navigate and select Swimlanes Matrix X bar

6. The following drop-down menu will be generated

ROLES (3)   ▾

ROLES (3)	✓
ASSETS	
DOCUMENTS (1)	
RESOURCES	
ORG UNITS	
RISKS	
RULES	
CONTROLS	
OBJECTIVES	
ENTITIES	
ATTRIBUTES	
KCI	
KPI (3)	
KRI	
CATEGORIES	

7. Select the desired item to be featured on the X-Axis

✳ All items that are featured within a process are marked by a set of brackets (#) with a number. The number corresponds to how many of each item is featured within the process.

✳ For optimized Matrix Swimlane view, users should not select the same item for both axes (Swimlanes Matrix X, Swimlanes Matrix Y)

8. Select the "Save Changes" button at the bottom right of the page.

C. Swimlanes Matrix Y: This feature allows users to set the Y-axis for Swimlane and Matrix Swimlane Graphs.

> ✳ This feature will be locked until the Swimlane or Matrix Swimlane Display has been selected

To use the Swimlanes Matrix X option, please see the steps below:

1. Select "Options" icon ⚙

2. Navigate cursor to Display bar

Map options ×

General −

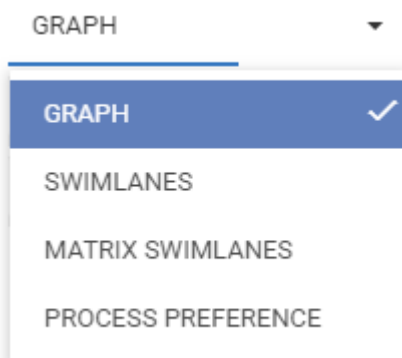|			
Display:	**GRAPH** ▾	Highlight:	NONE ▾
Swimlanes Matrix X:	ROLES (3) ▾	Node Color:	DISABLED ▾
Swimlanes Matrix Y:	ASSETS ▾	Performance Color :	DISABLED ▾
Expand IPL:	DISABLED ▾	Shape Type:	BPMN 2.0 ▾
Sub-Process and Reference Inline Explosion :	DISABLED ▾	Group by:	NONE ▾
Dedicated Pools:	DISABLED ▾	Auto Layout :	ON ANNOTATION ▾

RASCI-VS Filter +

Icons & Annotations +

[Save as Environment Default] [Reset to Default]　　　　[Close] [Save changes]
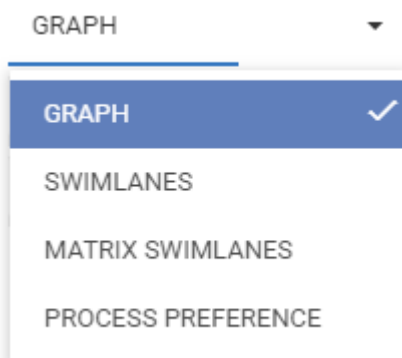
3. The following drop-down menu will be generated
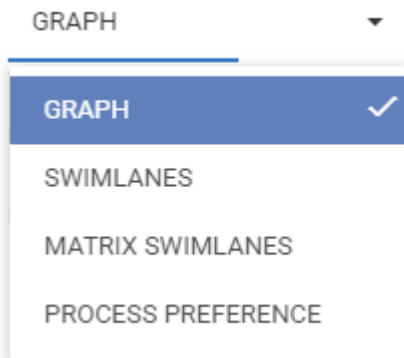
4. Select Swimlanes or Matrix Swimlanes

5. Navigate and select Swimlanes Matrix Y bar

Map options   ✕

General	−

Display:	MATRIX SWIMLANES ▾	Highlight:	NONE ▾
Swimlanes Matrix X:	ROLES (3) ▾	Node Color:	DISABLED ▾
Swimlanes Matrix Y:	DOCUMENTS (1) ▾	Performance Color :	DISABLED ▾
Expand IPL:	DISABLED ▾	Shape Type:	BPMN 2.0 ▾
Sub-Process and Reference Inline Explosion :	DISABLED ▾	Group by:	NONE ▾
Dedicated Pools:	DISABLED ▾	Auto Layout :	ALWAYS ENABLED ▾

RASCI-VS Filter	+
Icons & Annotations	+

[Save as Environment Default] [Reset to Default]   [Close] [Save changes]

6. The following drop-down menu will be generated

DOCUMENTS (1) ▼

- ROLES (3)
- ASSETS
- **DOCUMENTS (1)** ✓
- RESOURCES
- ORG UNITS
- RISKS
- RULES
- CONTROLS
- OBJECTIVES
- ENTITIES
- ATTRIBUTES
- KCI
- KPI (3)
- KRI
- CATEGORIES
- MIX RASCI-VS

7. Select the desired item for the Y-axis

❋ All items that are featured within a process are marked by a set of brackets (#) with a number. The number corresponds to how many of each item is featured within the process.

❋ For optimized Matrix Swimlane view, users should not select the same item for both axes (Swimlanes Matrix X, Swimlanes Matrix Y)

8. Select the "Save Changes" button at the bottom right of the page.

D. Expand IPL: This function allows users to expand Inter-Process Links to view the full implication of a given process.

If enabled (YES), Expand IPL will not redirect you to the linked process, but rather expand the graph to show the current process extending into the linked process.

If you have enabled the IPL **icon** in the graph settings, you will see a [icon] icon beneath the item having an IPL. Clicking on the IPL icon will convert it into the IPL annotation that is described below.

If you have enabled the IPL **annotation** in the graph settings or have clicked on the IPL icon, you will see an annotation as displayed below containing the process name in bold followed by the name of the task that the IPL will lead to. In this example, the linked process is named "Payment" and the linked task is named "Send invoice to accounting". Therefore, the annotation reads "**Payment:** Send invoice to accounting".
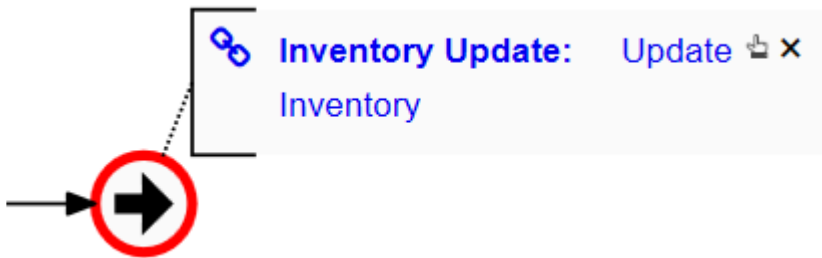
How to Expand IPL

1. Select "Options" icon [gear icon]

2. Navigate cursor to Expand IPL bar

Map options   ×

General		−

Display: GRAPH ▼   Highlight: NONE ▼

Swimlanes Matrix X: ROLES ▼   Node Color: DISABLED ▼

Swimlanes Matrix Y: ASSETS ▼   Performance Color : DISABLED ▼

Expand IPL: ENABLED ▼   Shape Type: BPMN 2.0 ▼

Sub-Process and   DISABLED ▼   Group by: NONE ▼
Reference Inline
Explosion :

Dedicated Pools: DISABLED ▼   Auto Layout :   ALWAYS ENABLED ▼

RASCI-VS Filter		+

Icons & Annotations		+

Save as Environment Default   **Reset to Default**   Close   **Save changes**

3. The following drop-down menu will be generated

ENABLED ▼

DISABLED

ENABLED ✓

4. Select Enabled

5. Navigate to a process. Make sure you are on a process that has an IPL to another process.

6. Make sure that you have enabled either the IPL icon or IPL annotation in the graph settings.

a. If IPL icon is enabled, click on the   icon in order to display the IPL annotation.
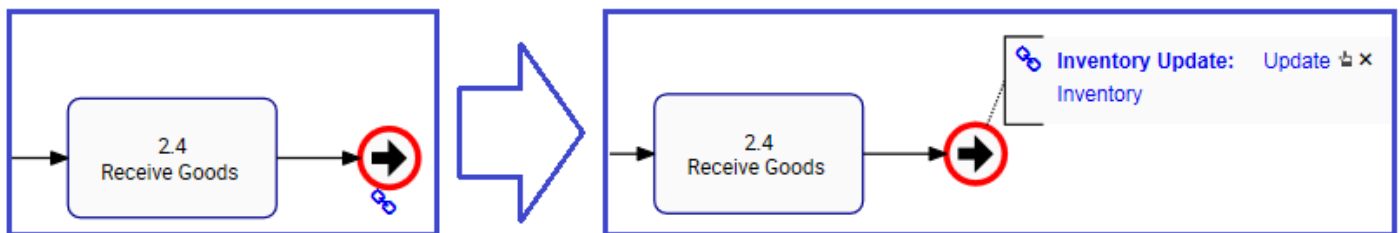
7. Click on the blue text of the IPL annotation.
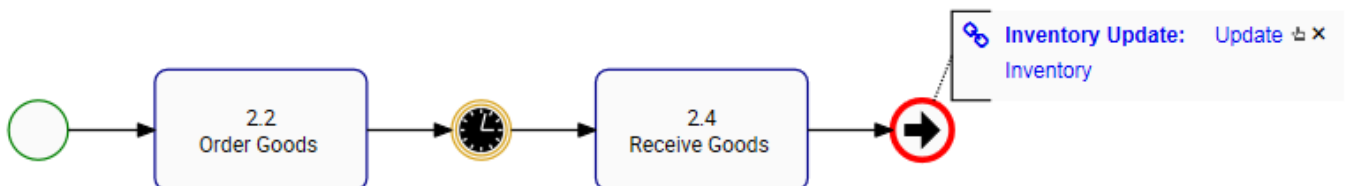
8. The process will now expand to incorporate all flow objects of the linked process.

a. You can continue expanding IPL's, click on the "**Payment:** Send Invoice to accounting" of the currently expanded process to expand it to the next linked process.
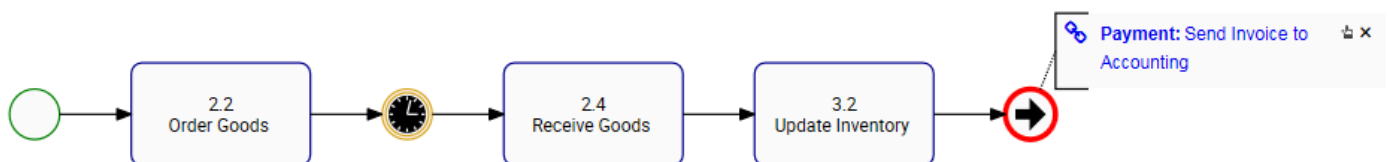
9. The process will now expand to incorporate all flow objects of the linked processes.
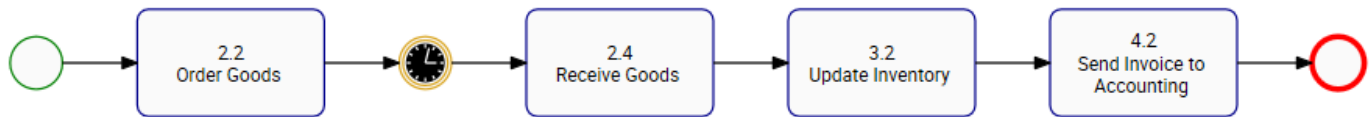
Below is an example of three (3) processes that are linked together via IPL.
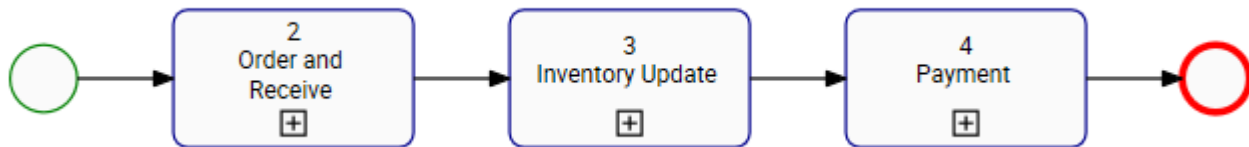
Below are the three processes displayed in line, where no IPL has been expanded yet. Notice that they all have start and end events, and those that have IPL's are displaying the icon.

G. Highlight: The highlight function allows you to highlight the Critical Path, the High Risk Path, or tasks that are Value Added. Addtionally, tasks to which a resource or a role that is linked to your user account can be highlighted and manual vs. automated tasks can be displayed as well.

Critical Path: The sequence of flow objects that determine the minimum length of time needed to complete the process. Flow objects on the Critical Path are manually determined and selected in the Webapp

High Risk Path: The sequence of flow objects that determine the path of highest risk throughout the process. Flow objects on the High Risk Path are manually determined and selected in the Webapp

Value Added: Flow objects that add value to the output of the process or organization. Flow objects that are Value Added are manually determined and selected in the Webapp

My Tasks [R]: Flow objects that are assigned to you via a resource or a role will be highlighted in the process map. Note that only flow objects for which you are RESPONSIBLE for will be highlighted.

Manual Vs Automated: Indicates the automation level of an activity. Highlighted in red are tasks which require human input (manual activity), highlighted in yellow are activities which require human input but are assisted by a system (semi-automated activity) and highlighted in green are activities which require no human input and is fully automated by a system (automated). The flow object will be highlighted depending on whether an asset, role, resource or org unit is assigned to it. Refer to the table below for the RASCI-VS assignment rules for the highlighting.

Color	RASCI-VS Assignment
GREEN	Asset [R] or/and [Su]
YELLOW	Asset [R] or/and [Su] + Role/Resource/Org Unit [R]
RED	Role/Resource/Org Unit [R]

H. Node Color: If enabled, the colors that have been set on flow objects within the EPC Modeler will be displayed in the graph or swimlane.

I. Performance Color: If enabled, flow objects will adopt the color (Green, Yellow, or Red) of the associated performance indicator (KPI, KRI, or KCI). If enabled, flow objects will adopt the color (Green, Yellow, or Red) of the associated performance indicator (KPI, KRI, or KCI). See the Performances section for detailed information about Performances and their colors. If multiple performance indicators are associated, the adopted color will be based on the weights assigned to them.

J. Shape Type: The process view allows users to toggle between different process annotations. This allows users to select the process notation they are most familiar with. Users can select the following notations

a. BPMN 2.0 (Business Process Modeling Notation)
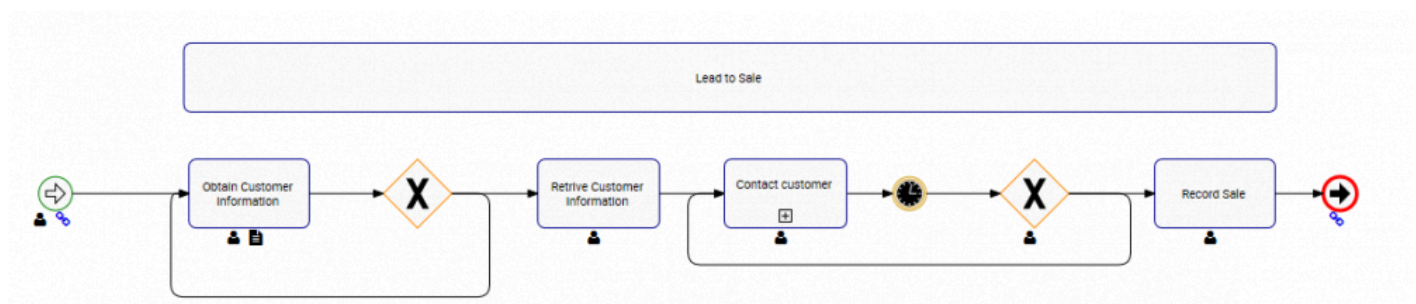
b. Simple BPMN (Business Process Modeling Notation)
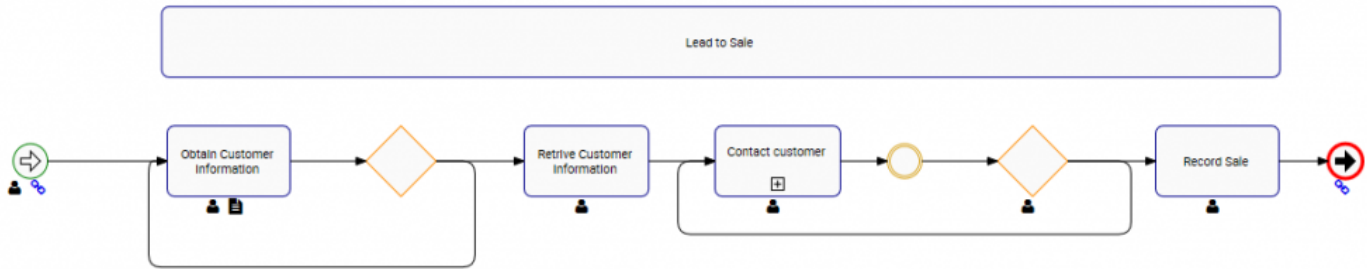
c. VSM (Value Stream Mapping)
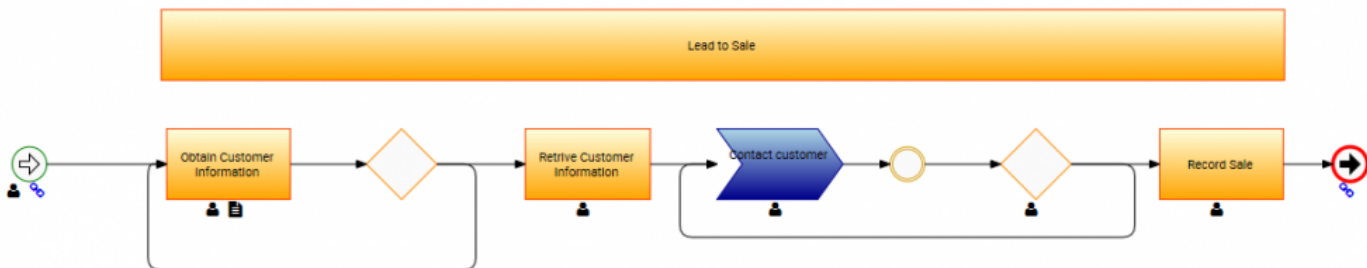
d. Modeler Default: This view allows users to mix BPMN 2.0, BPMN and VSM shapes
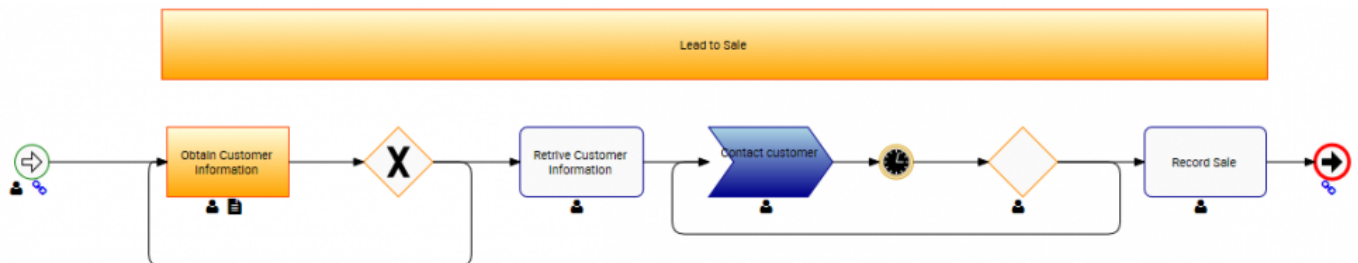
To toggle between Shape Types, please see the steps below:

1. Select "Options" icon

2. Navigate cursor and select Shape Type option

Map options   ✕

General					−
Display:	GRAPH ▾		Highlight:	NONE ▾	
Swimlanes Matrix X:	ROLES (6) ▾		Node Color:	DISABLED ▾	
Swimlanes Matrix Y:	ASSETS ▾		Performance Color :	DISABLED ▾	
Expand IPL:	DISABLED ▾		Shape Type:	BPMN 2.0 ▾	
Sub-Process and Reference Inline Explosion :	DISABLED ▾		Group by:	NONE ▾	
Dedicated Pools:	DISABLED ▾		Auto Layout :	ALWAYS ENABLED ▾	

RASCI-VS Filter	+
Icons & Annotations	+

[Save as Environment Default]   [Reset to Default]   [Close]   [Save changes]

3. The following drop-down menu will be generated

BPMN 2.0 ▾

BPMN 2.0	✓
SIMPLE BPMN	
VSM	
MODELER DEFAULT	

4. Select desired Shape Type

5. Select the "Save Changes" button at the bottom right of the page

K. Group By: This section allows users to classify and group different items within process maps based on environment-defined categories. These categories, wholly set and defined by environments, can allow an organization to tailor their process maps to industry and business specific circumstances such as cover processes vs support processes.

L. Auto Layout: Auto Layout allows users to generate a user friendly layout at the click of a button. Users can enable auto-layout on click, on annotations or have the setting constantly applied on processes.

Setting	Result
Always Disabled	Auto-layout is never run. The user has to manually run auto-layout by clicking the button.
On Annotation	Auto-layout is only automatically run when the user expands icons to annotations or when annotations are closed
Always Enabled	Auto-layout is always run automatically.

To use the Auto Layout option, please see the steps below:

1. Select "Options" icon

2. Navigate cursor to Auto Layout

3. The following drop-down menu will be generated

4. Select desired the Auto Layout option to view a process

M. RASCI-VS Filter: The RASCI-VS Filter allows users to filter which items get displayed on Graphs based

on their level of involvement. Using the RASCI-VS allows users to filter through involved parties and to understand who, what and how different items are involved in processes.

The RASCI-VS filter can be applied to the following items:

a. Roles

b. Assets

c. Resources

d. Org Units

To use the RASCI-VS Filters, please see the steps below:

1. Select "Options" icon   ⚙

2. Navigate cursor to Roles

Map options   ×

General	+
RASCI-VS Filter	−

Roles :	ALL ▼	Assets:	ALL ▼
Resources:	ALL ▼	Org Units:	ALL ▼

Icons & Annotations	+

Save as Environment Default   **Reset to Default**   Close   **Save changes**

3. The following drop-down menu will be generated

4. Select RASCI-VS filter you want to apply

> ✳ To use the filter effectively, a user **MUST** have the desired item (Roles, Assets, Resource or Org Units) enabled in the "Icons & Annotations" section.

N. Icons & Annotations: The Icons & Annotations filter allows users to decide how information and items relating to processes will be displayed on the process map. The three main options are as follows

Item	Description	Example
Icon	A graphical representation of a specific item in the EPC	
Annotation	An expansion of Icons with full textual description of the specific item	
None	An option to be selected if a user wishes to hide items from a graph	

> ✳ This feature allows users to organize their process maps. Simple processes can feature "Annotations" effectively, however "Icons" are recommended for more complex process viewing.

In-Graph Icons

Icon	Item
👤	**Roles**
🗄	**Assets**
📄	**Documents**
🚶	**Resources**
🔗	**Org Units**
⚠	**Risks**
🔨	**Rules**
🔒	**Controls**
◎	**Objectives**
📦	**Entities**
📦	**Attributes**
📊	**KCI**
📈	**KPI**
🏔	**KRI**
📄	**Materials**
🔗	**IPL**
⬚	**Categories**

🏷	**Annotation**
A	**Event & Gateway Name**

How to Enable Icons & Annotations

Users can enable Icons and Annotations within "Options" section. To enable Icons & Annotations, please see the steps below:

1. Select "Options" icon ⚙

2. Navigate cursor to Icons & Annotations section

Map options

General	+
RASCI-VS Filter	+
Icons & Annotations	−

Roles (6) :	ICON ▼	Assets :	ICON ▼	
Documents (1) :	ICON ▼	Resources :	NONE ▼	
Org Units :	ICON ▼	Risks :	ICON ▼	
Rules :	ICON ▼	Controls :	ICON ▼	
Objectives :	NONE ▼	Entities :	NONE ▼	
Attributes :	NONE ▼	KCI :	NONE ▼	
KPI :	ICON ▼	KRI :	NONE ▼	
Materials :	ICON ▼	IPL (2) :	ICON ▼	
Categories :	NONE ▼	Annotation :	ICON ▼	
Boundary Events :	NONE ▼	Description :	ICON ▼	
Event & Gateway Name :	NONE ▼	Services :	NONE ▼	

Save as Environment Default   Reset to Default

Close   Save changes

3. Navigate to the item you wish to select. For this example we will select the "Assets" item. Select the Assets bar

Map options   ×

General	+
RASCI-VS Filter	+
Icons & Annotations	−

Roles (6) :	ICON ▾	Assets :	ICON ▾
Documents (1) :	ICON ▾	Resources :	NONE ▾
Org Units :	ICON ▾	Risks :	ICON ▾
Rules :	ICON ▾	Controls :	ICON ▾
Objectives :	NONE ▾	Entities :	NONE ▾
Attributes :	NONE ▾	KCI :	NONE ▾
KPI :	ICON ▾	KRI :	NONE ▾
Materials :	ICON ▾	IPL (2) :	ICON ▾
Categories :	NONE ▾	Annotation :	ICON ▾
Boundary Events :	NONE ▾	Description :	ICON ▾
Event & Gateway Name :	NONE ▾	Services :	NONE ▾

[Save as Environment Default] [Reset to Default]   [Close] [Save changes]

4. Clicking on the bar will generate the following drop-down menu
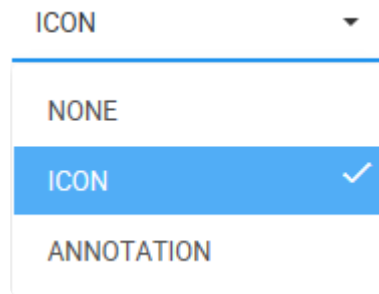
5. Select the desired notation and click the "Save Changes" at the bottom right of the page.

How to Re-Organize Annotations

The EPC allows users to shift the position of Annotations within a Graph to optimize viewing capabilities. Users can reorganize annotations based on a **pre-set placement** options, or personalize their map through **personalized map customization**.

To use the **Pre-Set Placement** options, Please see the steps below:

1. Enable Annotations for a particular item

2. Click on the Annotation that you wish to reorganize. The item in question will be highlighted as follows
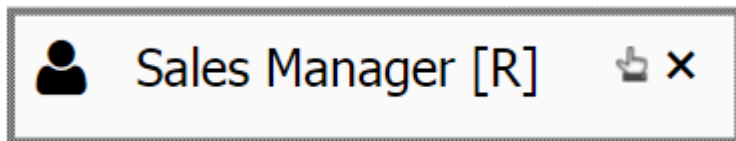
3. A user can select 1 of 8 positions to move the annotation. The graphic below highlights the 8 available options
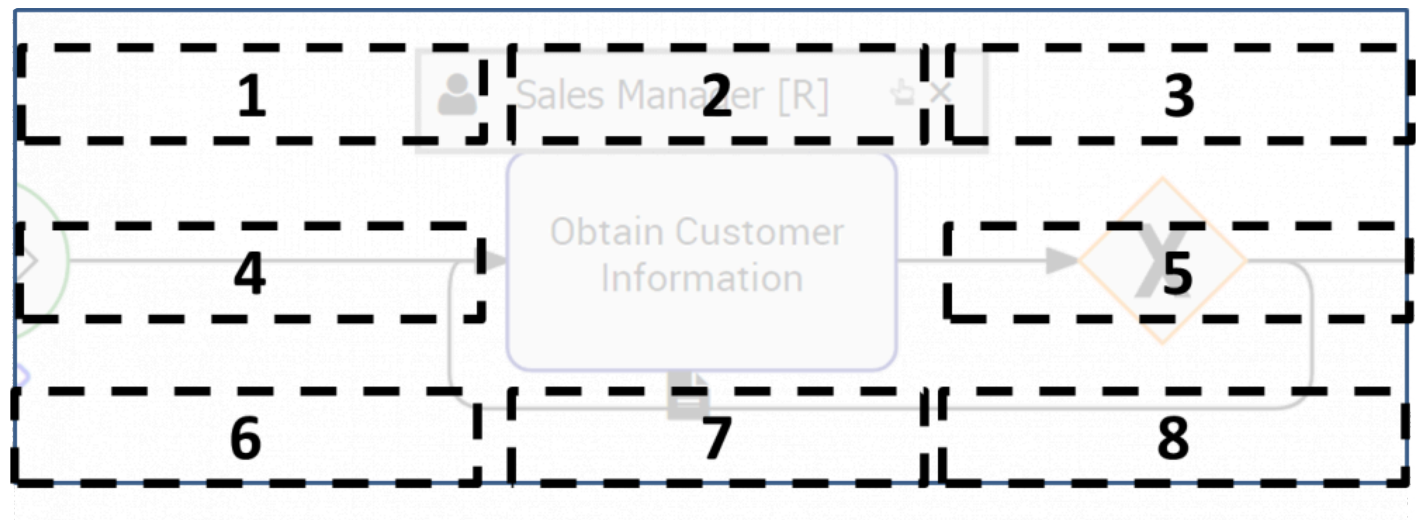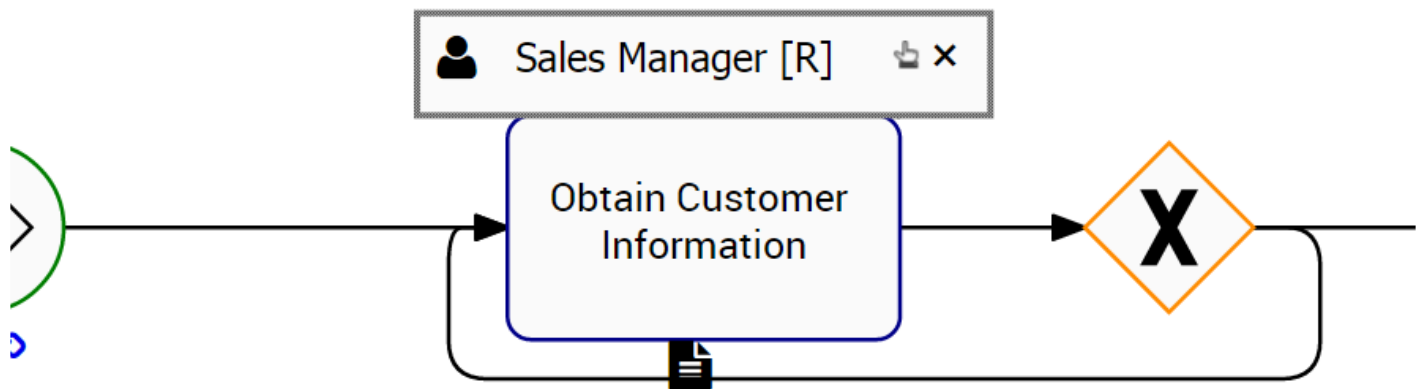
4. Click and hold the Annotation. Drag it to the desired location

To user **Personalized Map Customization**, please see the steps below:

1. Enable Annotations for a particular item

2. Click on the Annotation that you wish to reorganize. The item in question will be highlighted as follows
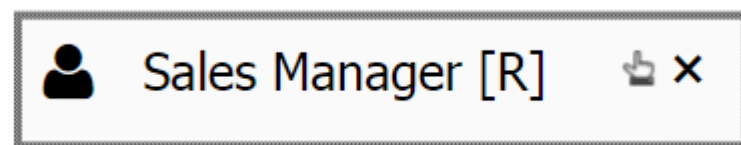
3. Select the ☝ icon **once** located on the right hand side of the annotation
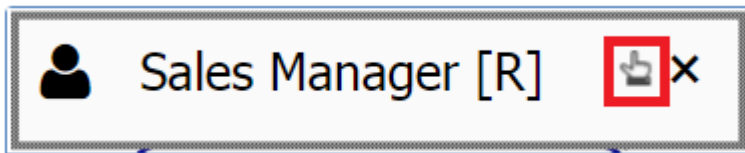
4. After clicking the ☝ icon, it will fade and be displayed as ☝ . This is an indication that you have selected the item in the Map Graph and can relocate the the annotation anywhere in the graph.

5. Navigate your cursor over the annotation until the ✛ icon is displayed.

6. Once the ✛ icon is displayed, click on the annotation and move is to the desired location on the page.
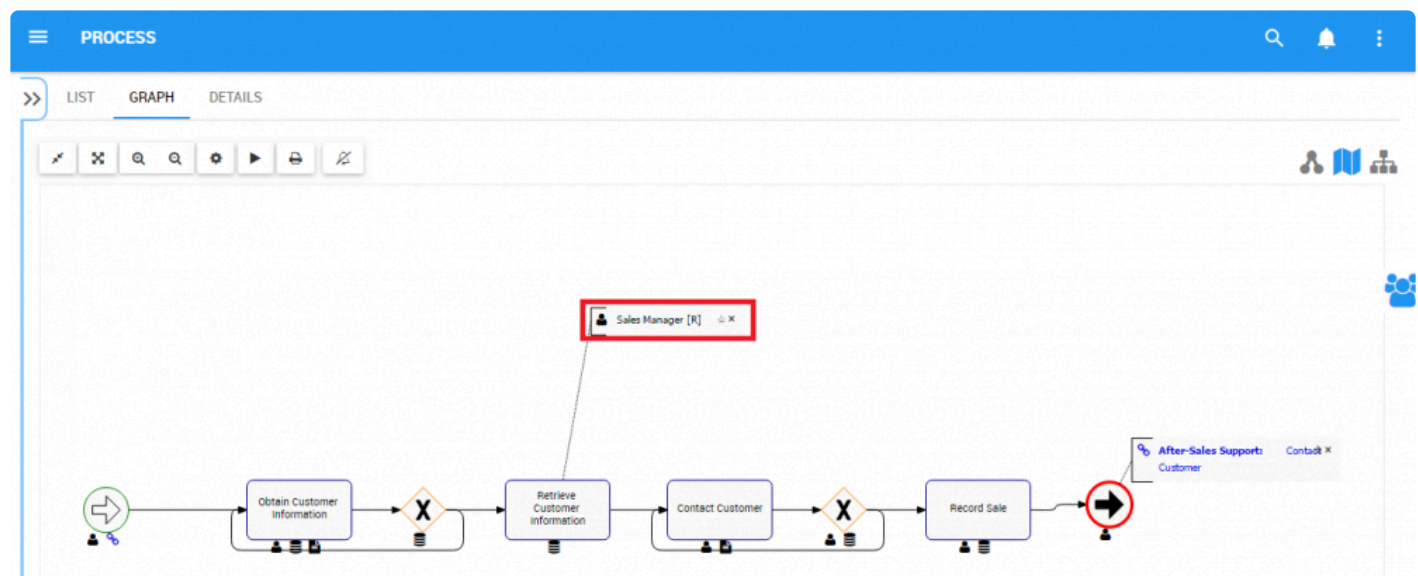
✳ It is recommended that users select the layout that minimizes overlapping objects

Expand Icons

The EPC allows users to manually expand Icons to Annotation format. Expanding Icons into Annotations allows users to see additional details about specific items within the process.

Please see the steps below:

1. Enable Icons for an item

2. Navigate cursor to icon

3. Double Click on the icon and it will expand into annotation format

4. You can minimize the Annotation, returning it to Icon format by clicking on the ✕ on the right-hand side of the annotation
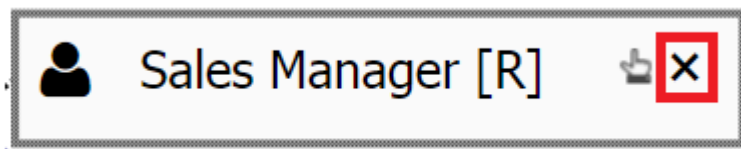
  Document icons allow users to preview the electronic documents uploaded in the EPC. The "Preview" button is symbolized by icon. Simply click on the icon to preview the document.

Web Editing Enhancements

The following Web Editing enhancements have been included in our 11.5 release.

- Users can browse previous version of objects other than process and revert the object to that version if required.
- Approval History can now be viewed from an object's detail page. If Digital Signature has been enabled, users will be able to see it in the approval history.
- New comparison options have been added:
  - Show Changes is now available from the tools menu at any time.
  - Users can Show Changes since the last time they approved an object during an approval cycle.
  - Users can Show Changes since the last time they confirmed on object.
- Users can choose to automatically or manually harmonize associations on a process. This allows better control of global changes in a local context.
- Users can now save the location of annotations for process maps.
- Users can modify approvers while an approval cycle is underway.
- Users can automatically apply approvers to the children of an object.

- [4.4.3.2.5.7.4 My Tasks](#)
- [4.4.3.2.5.7.5 Manual vs. Automated](#)
- [12.1.3.12.8 Browse Versions](#)
- [7.1.4 Approval History](#)
- [7.1.2 Show Changes](#)
- [12.1.6.4 Data Harmonization](#)
- [12.2.2.2.14 Saving Annotation Locations](#)
- [12.1.3.5 Approval](#)

4.4.3.2.5.7.4 My Tasks

The highlight function allows you to highlight the Critical Path, the High Risk Path, or tasks that are Value Added. Addtionally, tasks to which a resource or a role that is linked to your user account can be highlighted as well.

My Tasks [R]: Flow objects that are assigned to you via a resource or a role will be highlighted in the process map. Note that only flow objects for which you are RESPONSIBLE for will be highlighted.
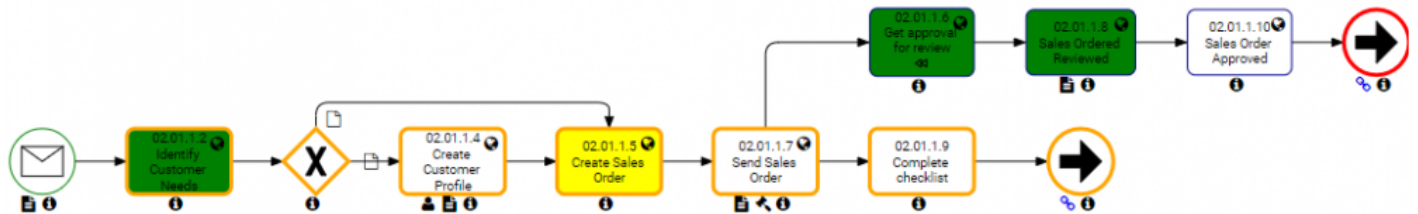
To enable 'My Tasks':

1) Navigate to the process you wish to view

2) Select the 'Settings' Icon
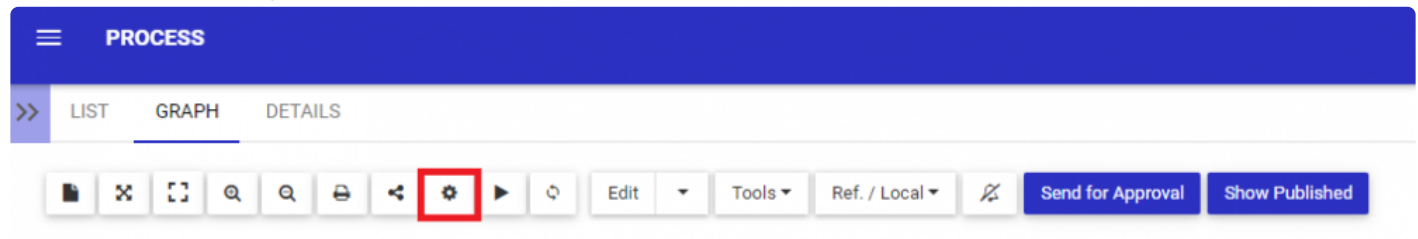
3) Click on the 'Highlight' dropdown

Map options

General

Display	GRAPH ▾	Highlight	NONE ▾	
Swimlanes Matrix X	ASSETS (6) ▾	Node Color		
Swimlanes Matrix Y	ROLES (12) ▾	Performance Color		
Expand IPL	ENABLED ▾	Shape Type		
Sub-Process and Reference Inline Explosion	ENABLED ▾	Group by		
Dedicated Pools	DISABLED ▾	Auto Layout		

Highlight dropdown:
- NONE ✓
- CRITICAL PATH
- HIGH RISK PATH
- VALUE ADDED
- MY TASKS [R]
- MANUAL VS AUTOMATED

4) Select 'My Tasks ®'

Highlight	MY TASKS [R] ▾
Node Color	
Performance Color	
Shape Type	
Group by	
Auto Layout	

Dropdown:
- NONE
- CRITICAL PATH
- HIGH RISK PATH
- VALUE ADDED
- MY TASKS [R] ✓
- MANUAL VS AUTOMATED

5) Click on 'Save Changes'

Save changes

6) Review the Results
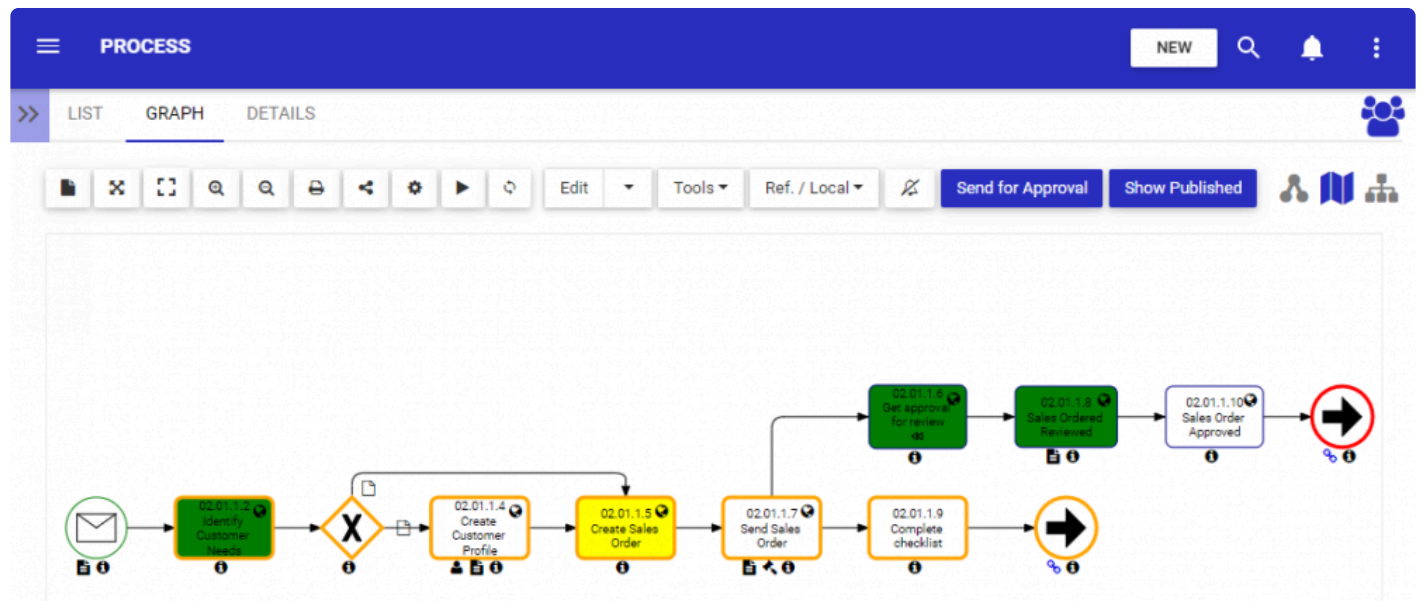
4.4.3.2.5.7.5 Manual vs. Automated

The highlight function allows you to highlight the Critical Path, the High Risk Path, or tasks that are Value Added. Addtionally, tasks to which a resource or a role that is linked to your user account can be highlighted as well as the Manual or Automated Tasks.

Manual Vs Automated: Indicates the automation level of an activity. Highlighted in red are tasks which require human input (manual activity), highlighted in yellow are activities which require human input but are assisted by a system (semi-automated activity) and highlighted in green are activities which require no human input and is fully automated by a system (automated). The flow object will be highlighted depending on whether an asset, role, resource or org unit is assigned to it. Refer to the table below for the RASCI-VS assignment rules for the highlighting.

Color	RASCI-VS Assignment
GREEN	Asset [R] or/and [Su]
YELLOW	Asset [R] or/and [Su] + Role/Resource/Org Unit [R]
RED	Role/Resource/Org Unit [R]

To enable 'Manual Vs. Automated':

1) Navigate to the process you wish to view

2) Select the 'Settings' Icon

3) Click on the 'Highlight' dropdown

4) Select 'Manual Vs. Automated'

5) Click on 'Save Changes'

6) Review the Results

12.1.3.12.8 Browse Versions

Users are able to browse previous versions of any objects in EPC and restore them.

Browsing previous versions is available in the following modules:

- Process
- Document
- Organization
- Rule
- Risk
- Control
- Performance
- Master Data

Accessing a previous version

To access a previous version of an EPC object, follow these steps:

1. Navigate to the details page of any EPC object. Under **Tools**, hover your mouse over **Browse Versions**. Click on the version number you wish to see.
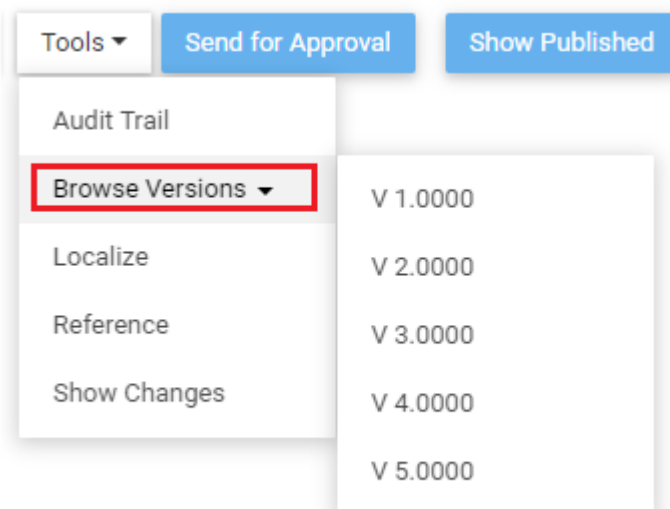
> ❗ Only published versions are accessible. Note that the latest published version of the object will not appear in this list. To access the latest published version, click on **Show Published** (refer to this <u>section</u> for more information.)

2. You will be redirected to the selected version of the object. Note that you will not have edit capabilities while on a previous version.

LIST   GRAPH   **DETAILS**

Edit   Tools ▾   Show Latest   Revert

README **[V 2.0000]**

ⱽ Description
    desc2
❯ File Details
❯ Responsibilities
❯ Associations
❯ Documents
❯ Properties
❯ Impact
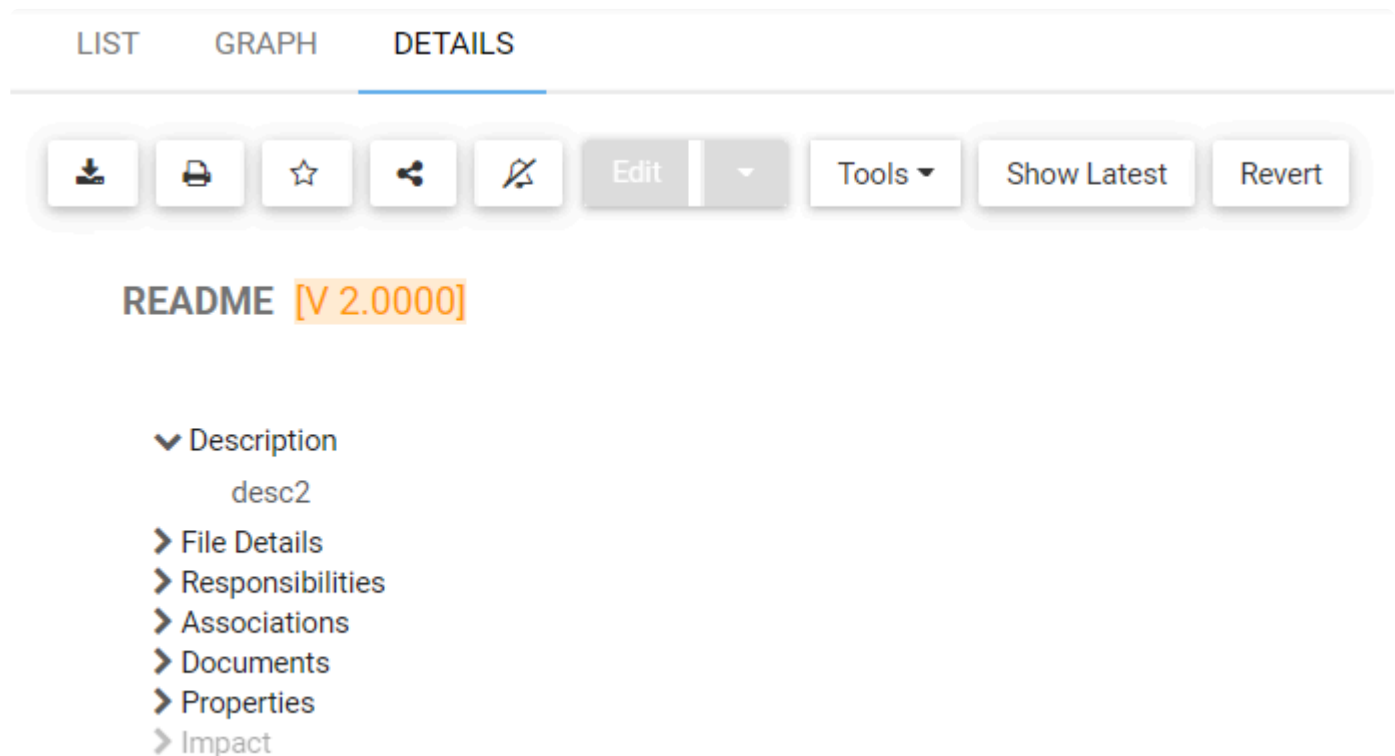
3. To navigate back to the latest version, click on **Show Latest**

4. You can also navigate to other versions by repeating step 1.

5. To restore this version of the object, click on **Revert**. For more information on restoring objects, refer to the <u>Revert Previous Version</u> section.

Restrictions

The following functionalities will be disabled while the user is viewing an older version of the object.

- Copy

- Move
- Delete
- Object Book
- Impact List

You will be able to navigate to the following graphs, but they will not reflect historic information. They will always show the latest information of the object.

- Impact Graph
- Hierarchy Graph
- Data Diagram for the Master Data Module

7.1.4 Approval History

Rejected Cycle

When an approval cycle is interrupted by a user that rejects the changes, an "Approval Rejected" box will be displayed at the top of the Graph and Details page. This box will display the list of approvers, and show who rejected the Approval.
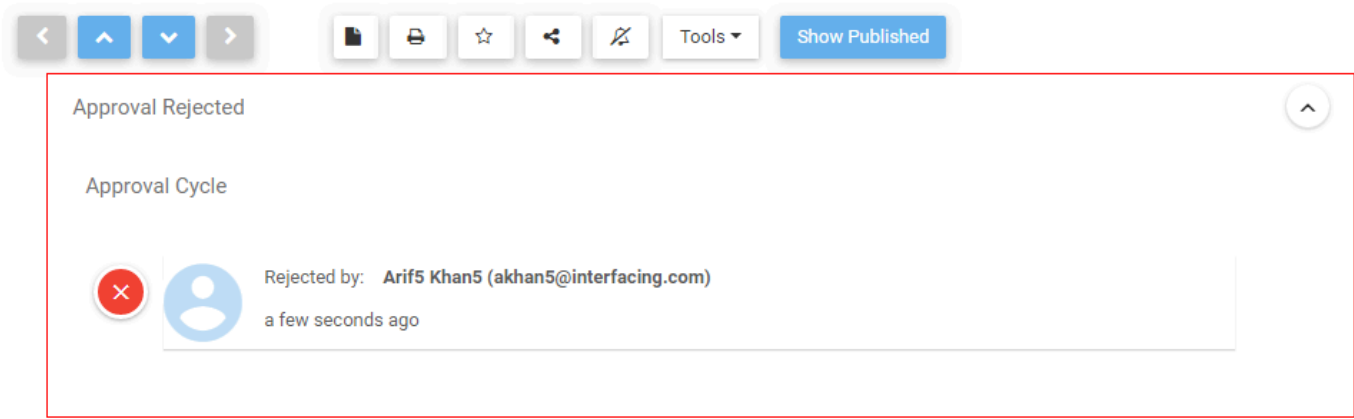
Approved Cycle

When an approval cycle has been Approved the object has been Published, an "Approved" box will be displayed in the Details page, under the Properties section, under the Current version. This box will display the list of approvers, and will show that they all approved the changes.

> ✳ If Digital Signature has been enabled, an image will appear next to the approver's name in the box.

> ✔ Description
>> *No Data Found*
> ❯ Goal
> ❯ Responsibilities
> ❯ Associations
> ❯ Risks
> ❯ Documents
> ❯ Master Data
> ❯ SIPOC
> ✔ Properties
>> ✔ Current Version
>>> Version Number: 2.0000
>>> Last Modified: a few seconds ago

Approved

Parallel Approval Cycle

Approved by: Arif5 Khan5 (akhan5@interfacing.com)
3 minutes ago

> ❯ Version History
> ❯ Analysis
> ❯ Impact

7.1.2 Show Changes

When you are required to approve an object in the EPC, users have the ability to visualize the proposed changes to the object prior to approval. Using the 'Show Changes' feature, your approvers can see the original object and its details, and see the proposed changes highlighted in green, red and yellow to help you see what content is new and improved.

Your approvers can:

1) Visualize Process Map Changes
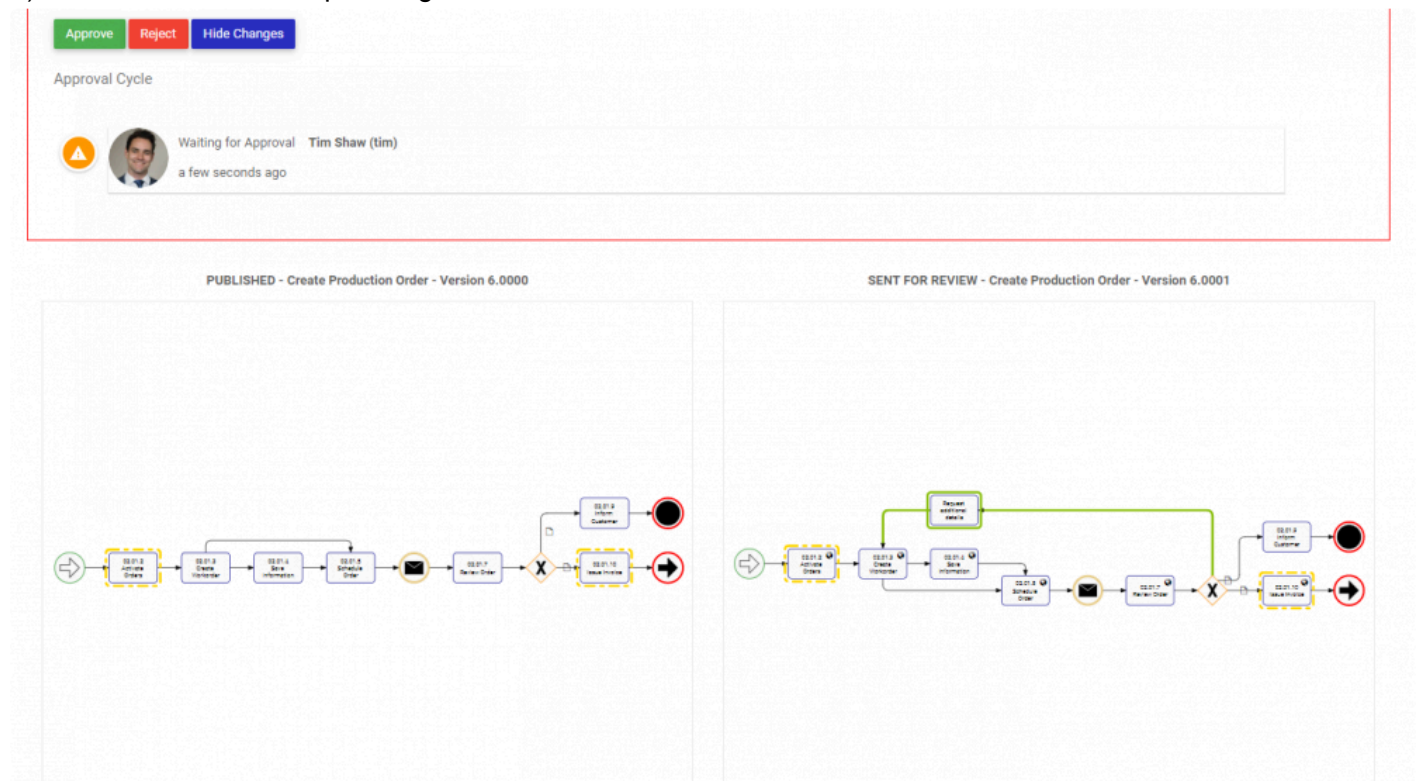
2) Visualize Object Details Pages (all objects)

Approval Cycle

⚠ Waiting for Approval **Tim Shaw (tim)**
a few seconds ago

🖥 **02.01 Create Production Order** [V 6.~~0000~~0003]
Identifier: 6271

⌄ Description

A production order specifies which material is to be produced, where it is to be produced, which operations are required to do this and on which date production is to take place. It also defines how the order costs are to be settled.

As described in this procedure, production orders can be created manually without being previously requested. Alternatively, they can be automatically created by converting a planned order. During requirements planning (MRP run), planned orders are created at every BOM level to cover requirements. For materials produced in-house, a secondary requirement is also generated when the BOM is exploded, which is necessary for producing the end product or assembly. For externally produced materials, an ordering transaction is initiated when a purchase requisition is generated. ~~Planned orders generated in the MRP run can be converted individually into production orders from the current stock/requirements list. They can also be grouped together by the MRP run and converted into production orders together. These production orders can be released together.~~

For all additional details please email support@test.com

⌄ Goal
No Data Found
⌄ Responsibilities
⌄ Roles
👤 Production Manager [R]
⌄ Org Units
🔧 Quality Assurance [R]
🔧 Quality Control [C, I]
🔧 Quality Management [C, I]

3) View a summary of proposed changes

Simply click on the 'Show Changes' button

7.1.2.1 Show Changes Since My Last Approval

An object may go through several approval cycles before it gets published. For instance, in a serial approval cycle, the second approver might have noticed an error that the first approver did not spot, and will reject the changes. Alternatively, an object may have passed an approval cycle, but underwent modifications before its publication, triggering another approval cycle. In both of these scenarios, the approver might not remember what they have approved if there were several cycles between the approved/rejected change and the publication.

> ✳ Note: once the object gets published, the button will not be available until the user approves or rejects an approval cycle at least once.

To compare changes since your last review of the object, follow these steps:

1. Make sure that you have approved or rejected a change on an object at least once.

2. Within the details tab of the document, expand the approval cycle box and click on **Show Changes Since My Last Approval**. Elements that were added will be highlighted in green, and elements that were deleted will be highlighted in red.

✻ Users can also compare changes in the process map by following the instructions above while viewing the process map.

12.1.3.12.7 Show Changes

Users can use the "Show Changes" feature to compare the details page of the current version of an EPC object to the previously published version.

This feature is available on all EPC objects.

To compare your current draft, follow these steps:

1. Navigate to the details page of any EPC object. Under Tools, click on **Show Changes**
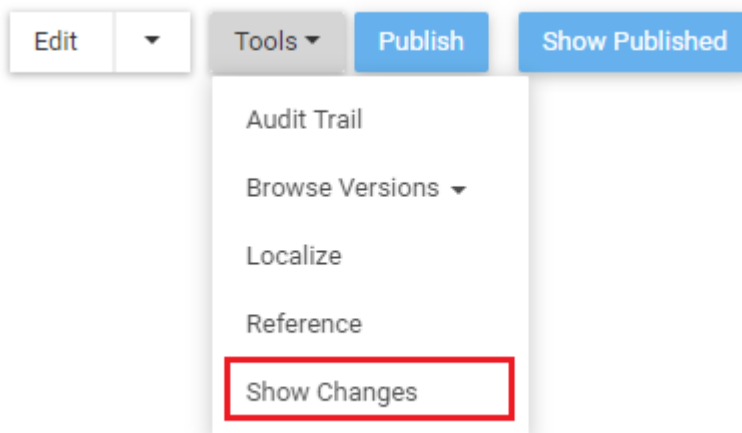
> ✳ **Show Changes** is only available on Draft versions of objects.

2. Your current draft version will be compared to the previously published version

In **GREEN** are the information that was added/changed from the previously published version to the current version
In **RED** are the information that was removed/changed from the previously published version to the current version

3. To exit the comparison, under Tools, click on **Hide Changes**
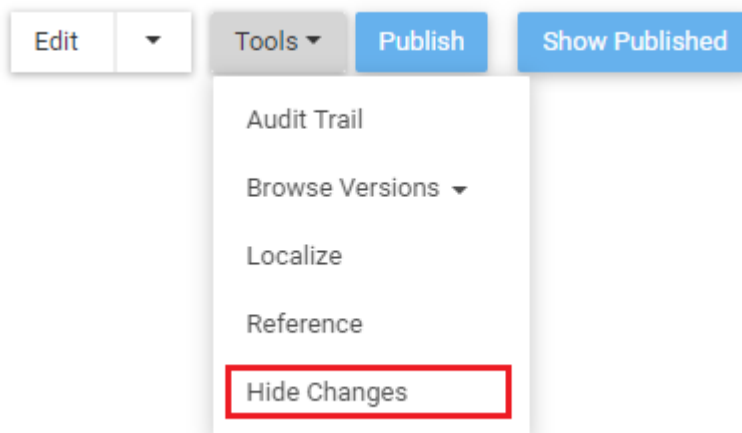
7.2.1 New Version Confirmation

Users who are associated with RASCI-VS to objects undergoing change, will receive notification of the change. This notification is designed to inform parties of changes in processes relevant to them, assuring that changes do not go unnoticed.

Users associated with the process or object undergoing change will receive:

1. Email Notification

2. In-App Notification

3. In-App Message

Confirmation Required   ⌃

Object Name: Recruit to Hire
Version: 8.0000

Published by: Kevin Tran (kevin)
Publisher's Comment:
No comment for this version

Your comment:

I acknowledge I have read and understood the contents of this Process and have been given full opportunity to discuss the implications of any changes to my role and/or procedures.

Confirm   Show Changes Since My Last Confirmation

Show Changes Since My Last Confirmation

Users who wish to compare the current published version with the last version they have confirmed can use the **Show Changes Since My Last Confirmation** button. Upon clicking the button, elements that were added will be highlighted in green and elements that were removed will be highlighted in red. Note that this button will be disabled if the user has never confirmed an object.

12.1.6.4 Data Harmonization

Users can specify how much control the user has over an object's associations. There are 3 degrees of control strictness to choose from:

- **High** (Never Harmonize Major and/or Minor Changes)
- **Medium** (Only Harmonize Minor Changes)
- **Low** (Always Harmonize Major and/or Minor Changes)

A strict object indicates that an object's association versions is frozen upon a status change (sent for review -> approved -> published). Strict objects mean that when there is an approval or a publication, we are pointing the version of the object to the version of the associated object that was "approved" for use. We are "freezing" the process' associated object's versions.

High Control

When an object is designed as "High Control", or "Never Harmonize Major and/or Minor Changes", the user has a high degree of control over an object's associations. Minor or Major publication of associated objects will never be synced automatically.

Medium Control

When an object is designated as "Medium Control" or "Only Harmonize Minor Changes", major publication of associated objects will render the object as "Out of Synx". Any minor publications will be automatically updated by EPC.

Low Control

This is the default setting for all objects. Major or minor publication of an object's associations will always be automatically updated without notifying the user.

Setting the Control Level

To set processes' control level, follow these steps

1. Edit a process

2. Under the **Properties** tab, find the section labelled **How Strict is this Process?** and set the desired control level

> ✳ If you do not see the section, Data Harmonization has not been enabled. Refer to this section for more information.

10.9.1.3 Data Association Harmonization

Within the advanced system settings, administrators are able to enable data association harmonization as well as setting the default harmonization value.

See (insert freeze section) for more information.

To Enable Data Association Harmonization

1. Find the key titled **ENABLE_HARMONIZATION**. To edit the key value, click on the pencil icon on the far right side.

2. Change the value to **true** to enable and **false** to disable the feature.

> ❗ Enabling or Disabling harmonization will not completely disable harmonization. New processes that are created after the key value has been changed will not have Harmonization options. Old processes that were set to High, Moderate or Low control will keep behaving as such.

3. Click on **Copy Link and Apply Changes** to save the settings

To Change the Default Harmonization Value

1. Find the key titled **HARMONIZATION_CONTROL_DEFAULT**. To edit the key value, click on the pencil icon on the far right side.

ENABLE_GOOGLE_ANALYTICS	false	✎
ENABLE_HARMONIZATION	true	✎
ENABLE_NAV_BAR_ERROR	false	✎
FILE_PREVIEW_MAX_FILE_SIZE	52428800	✎
FILE_PREVIEW_TIMER_DEFAULT	60000	✎
HARMONIZATION_CONTROL_DEFAULT	low	✎

2. Acceptable values for this key are:

- **low**: This is the EPC's default value. This value corresponds to "Low Control". Changes in association versions are always synced automatically for any major or minor publications.
- **moderate**: This value corresponds to "Moderate Control". Changes in association versions are only automatically synced for minor publications. Any major publications of an association will mark the subject designated as Moderate Control out of date.
- **high**: this value corresponds to "High Control". Changes in association versions are never automatically synced, whether for major or minor publications. Any publication of an association will mark the subject designated as High Control out of date.

> ❗ The default control value will only be inherited by new processes that are created after this key is changed. Old processes will not be affected by changing the value of this key.

3. Click on **Copy Link and Apply Changes** to save the settings

WARNING

Changing system settings could cause problems and even make system inaccessible. Copy the link below to be able to restore the Settings. This link is valid for only one hour.

```
http://epc10test.interfacing.com/system-
setting-api/reset?
token=evJhbGciOiJSUzI1NiIsInR5cCI6IkpXVCJ9
```

[Copy Link] [Copy Link and Apply Changes]
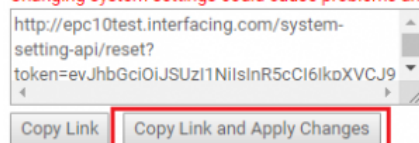
12.1.6.4.1 Out of Sync

The harmonization setting can allow a better control of processes. It allows keeping the associations linked to a process as they were on that specific version, even if the association has a more recent version.

By selecting a level of strictness on a process, changes done on associations linked to the process will put the process to an Out of Sync status, showed as a box on the details page.
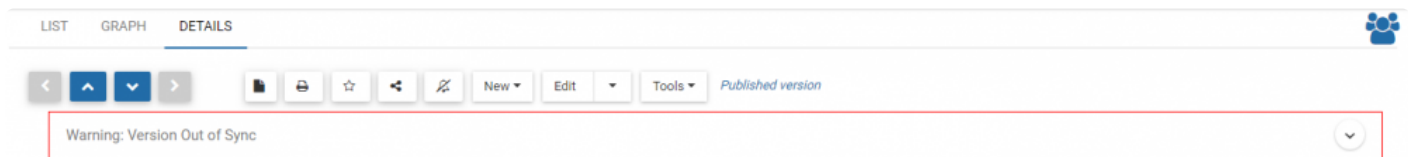
For this Out of Sync box to be displayed:

1. The process must be set to a Moderate or High level of strictness/control
2. The process must be either Published or in an Approval Cycle.
3. At least one association must have a new published version.

For example, for the process above, it was published to version 4.000 with a document on version 2.000. However, the document is changed and re-published to version 3.000. The process is now out of sync

The box contains actions that can be done on the Out of Sync version. It will be removed from the details page after a new Draft version is included.

12.1.6.4.2 List of Changes

This list can be found when you expand the Out of Sync box. See Out of Sync for more information.

The list includes all associations and sub-processes that have been modified and published after the main process has been Published or sent for Approval. The list displays these elements:

Column	Description
Name	Name of the object (association, sub-process)
Type	Type of object
Action	What was done (for now, only option is Modified)
Published Comment	The comment that was written when that object was published
Associated Version	Version of the object on the process
Current Version	New version of the object

See Synchronize for more information on data synchronization.

12.1.6.4.2.1 Synchronize

The Synchronize button allows users to include the changes done on objects in the latest published versions of the process, without creating a new version of the process.

> ✱ If the process is currently locked in an approval cycle, **Synchronize** will not be available.

Follow these steps to synchronize the association change(s):

1. Select the objects to include in the synchronize

2. Click on the "Synchronize" button

3. The objects will be removed from the list, and the changes will be included in the published version of the process

12.1.6.4.2.2 Create Improvement Request

The **Create Improvement Request** button allows users to select changes but specify that these changes should be included in another version.

To create an IR for an out of sync process, follow these steps:

1. Select the objects they want to include in the IR.

2. Click on the "Create Improvement Request" button.
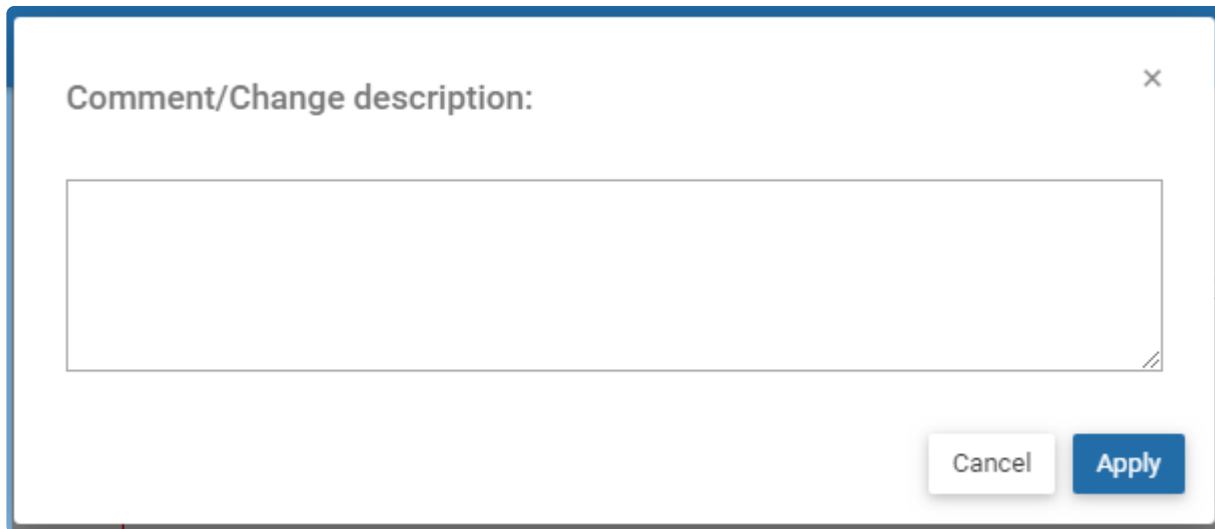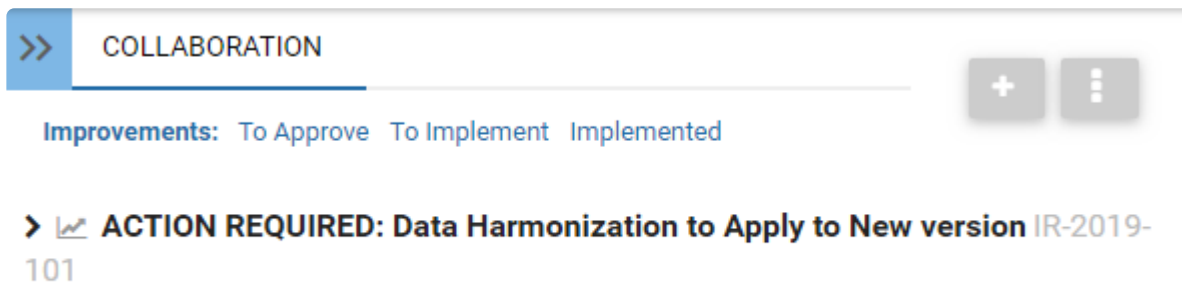
3. You can add a comment to the IR.

4. The collaboration window will open with the new IR. It is already approved. All the objects that were selected are listed.

5. To include all changes in a new version, simply edit the process, all remaining changes will be included in the next version.

12.2.2.2.14 Saving Annotation Locations

Users can save annotation position by dragging them on the canvas.

Annotations can be moved and saved for all of the following:

- All EPC object associations
- Boundary Events
- Event & Gateway Name
- Inputs/Outputs
- Annotation
- Categories
- Description
- IPLs

In Graph Edit

To save an annotation's position, drag the annotation label to the desired position and save the graph
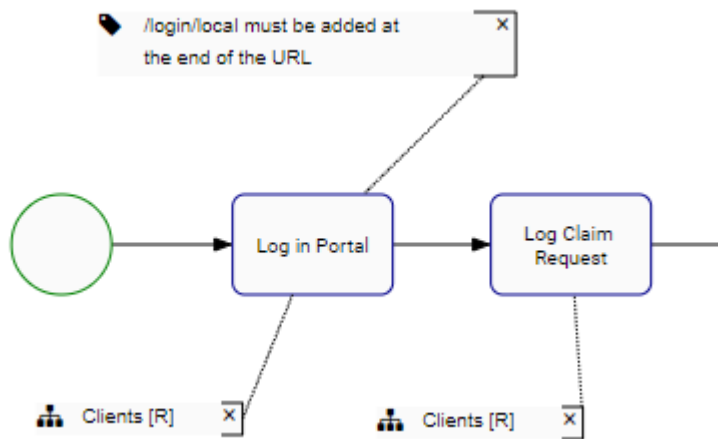
> ❗ If auto-layout is run when editing the process graph, all annotations will go back to their original position.

In Graph View

Users will see the map as it was saved while the auto-layout options is set to "On Click" or "On Demand".

! If the user's map options is set to "Enabled", auto-layout will automatically be run and the annotations will go back to their default position. To view annotations in their saved location, change the auto-layout option to "On Click" or "On Demand" and refresh the page.

12.1.3.5 Approval

Approval cycles often involve multiple individuals before changes can be implemented. This is often the case as business activities that are subject to change may affect multiple different roles and resources, requiring their consent prior to change. These approval cycles can vary dependent on the organization, and the importance of the request being made. As such, the EPC supports both parallel and serial approval cycles.

Approval Cycle	Description
Parallel	All approval requests are simultaneously sent to approvers. The changes will be approved once all approvers have approved. E.g. A request for approval is sent out to a controller, the VP Finance, and the CEO simultaneously
Serial	Approval cycle following a sequential of approvers. Approval requests are first sent to the initial approver. Upon approval, a secondary approval request will be sent to the following approver and so on. E.g. First approval request sent to a controller, then the VP Finance and finally the CEO.

Web Modelers can set an approval cycle for **all EPC objects.** The Approval button is available on the toolbar under the object's Details tab.

Web Modelers need to ensure they have the permission to be a Web Modeler, their displayed content is set to Show Latest, and their editing tool is the Web.

Follow the instructions to set an Approval Cycle

1. Navigate to the details section of the object. In this example, an Organization Unit
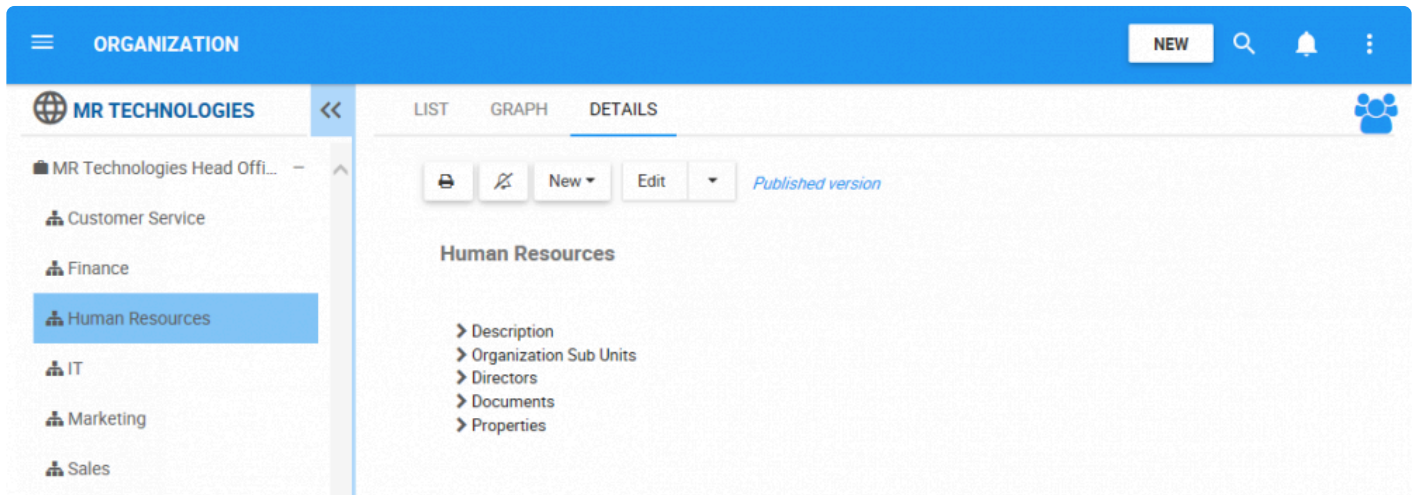
2. Navigate to the ⌄ box
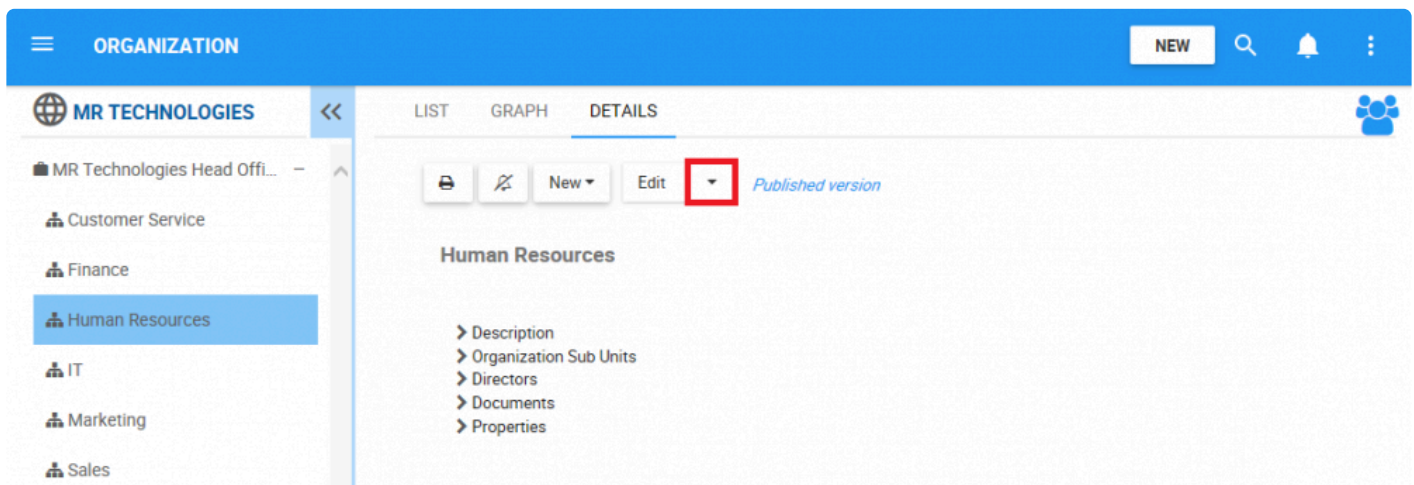
3. A drop-down menu will be generated. Choose the "Approval" box
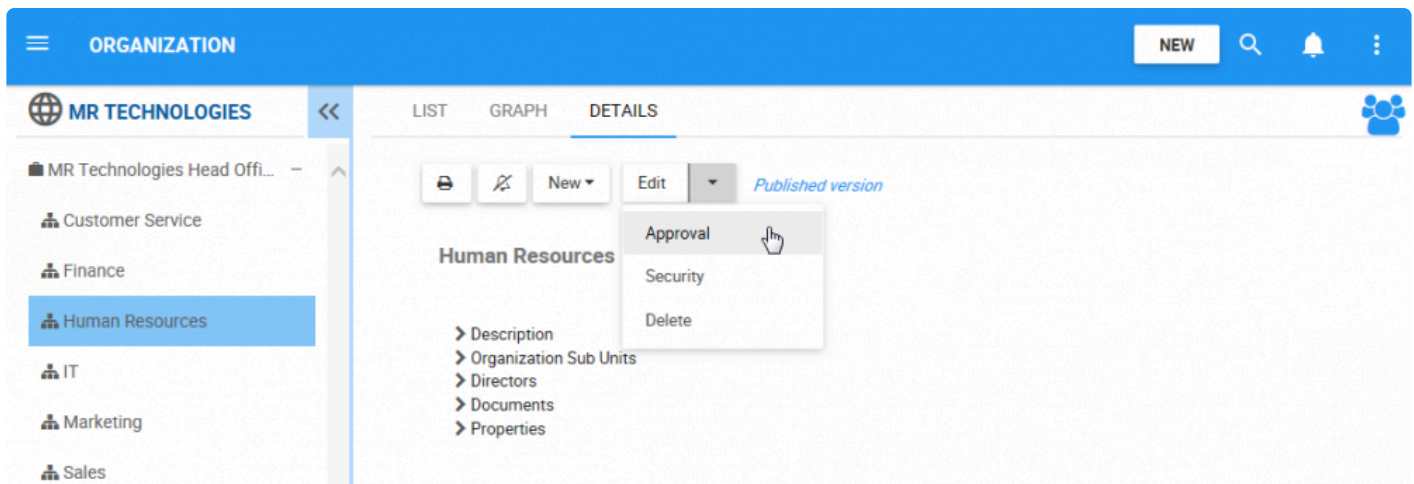
4. You will be redirected to the Assign Object Approval Cycles window

5. Navigate to the "Select Approval Cycle Type" box

6. Select the Approval Cycle type

7. Navigate to "Select Approvers" and select a filter

8. Type the name of the Role you want to assign as the approver. From the search suggestions, click to select the Role you want to assign

> ✳ The list of Roles will populate based on key word typing

Assign Object Approval Cycles

×

Select Approval Cycle Type	SERIAL	▼

| Select Approvers | ROLE ▼ | dired |

         Accounts Receivable **Direc**tor [ROLE]

         Director of Human Resources [ROLE]

☐   Apply changes to all children

Cancel   **Save**

9. The Role(s) and/or Resource(s) assigned as approvers will appear in a table

Assign Object Approval Cycles

×

Select Approval Cycle Type	SERIAL	▼

| Select Approvers | ROLE ▼ | direc |

☰ 1	Director of Human Resources	Role	×

☐   Apply changes to all children

Cancel   **Save**

✳️ To remove approvers from an Approval Cycle, click on the "x"

10. Save the Approval Cycle

Once the object has been successfully been approved by approvers in the cycle, the Web Modeler will be able to [publish the object](#).

To learn more about Approval Cycles, [click here](#)

Modify Approval Configuration

Users can now modify the configuration of the approval cycle while an approval cycle is in progress. The changes done will apply to the ongoing approval cycle. Users can

- Delete an Approver
- Add a new Approver
- Switch the Cycle Type
- Switch the Order of Approvers

To modify the order, simply drag and drop an approver to the desired position within a cycle.

Apply to all children

You can assign the same approval configuration to a process and all of its children. It can also be a quick way to remove all approvers assigned to a process and its children (by removing approvers and saving). To do so, a user must repeat the previous steps, but before saving, he has to check the box so the Save can apply to all children.

Assign Object Approval Cycles

×

Select Approval Cycle Type   SERIAL   ▼

Select Approvers   FILTER TYPE ▼   Type to find a Role or Resource

☰ 1	HR Manager	Role	×
☰ 2	Business development manager	Role	×

✓   Apply changes to all children

Cancel   **Save**

Export Enhacements

The following export enhancements have been included in our 11.5 release:

- [12.1.4.1.2.2 Export EPC Objects](#)
- [12.1.4.5.2 Export Excel Content](#)

12.1.4.1.2.2 Export EPC Objects

Follow the steps below to export specific EPC Objects. The export wizard will create a data file with the format .epc.

1. From the WebApp Toolbar, select the three dots > Export
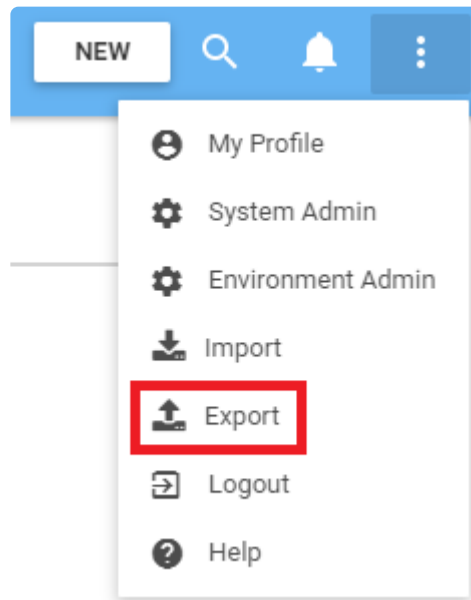
2. Select **EPC Object (.epc)**

Export

×

Select an export Option :

○ EPC (.epc)

◉ EPC Object (.epc)

○ Visio (.vsdx)

○ BPMN (.bpmn)

○ Excel (.xlsx)

Process Manager —

Select a process   Type to find a Process

Selected Process :

3. Select one or more processes to export

A	Type to search for a specific process
B	Click on this button to search by hierarchy
C	Processes being exported will be listed here. Click on "X" to remove a process from the export list
D	Include all associations of this process within the export file

4. Once you are done, click on **Export**.

5. A window will open to inform you on the export. Click **Keep Working**.

6. You will will receive a confirmation when the export is complete. Click on **See All**.
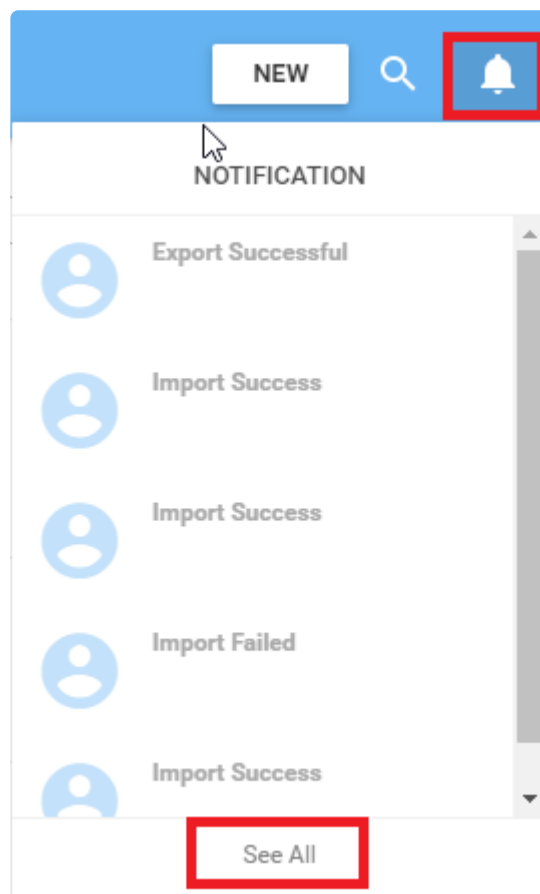
6. The **"Export Successful"** notification contains the link to download the export file in the requested format.
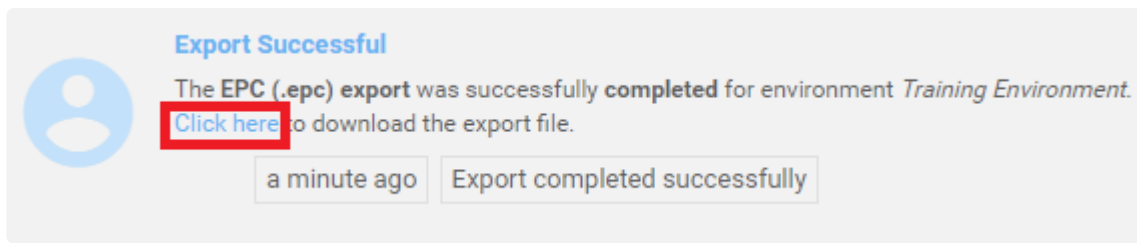
12.1.4.5.2 Export Excel Content

Environment Admins can export EPC content into an Excel spreadsheet. This feature is useful to quickly create an Excel Document containing the EPC content slected by the Admin.

To export an Excel file, follow the steps below:

1. Within the EPC menu (located on the top right corner), click on **Export**
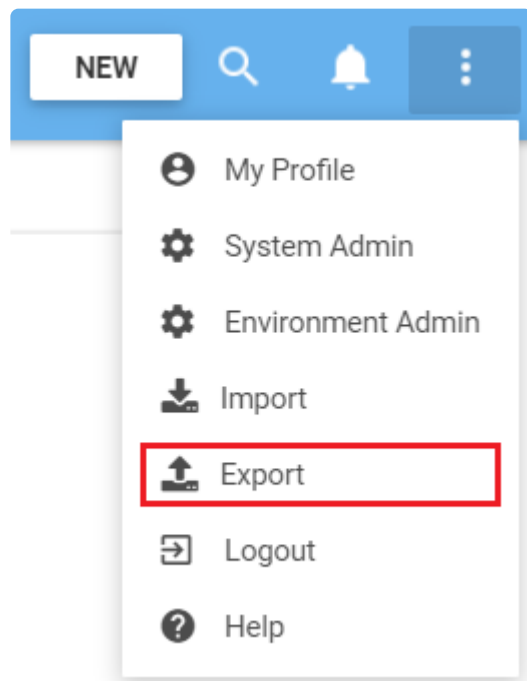
2. In the Export window, select **Excel (.xlsx)**.
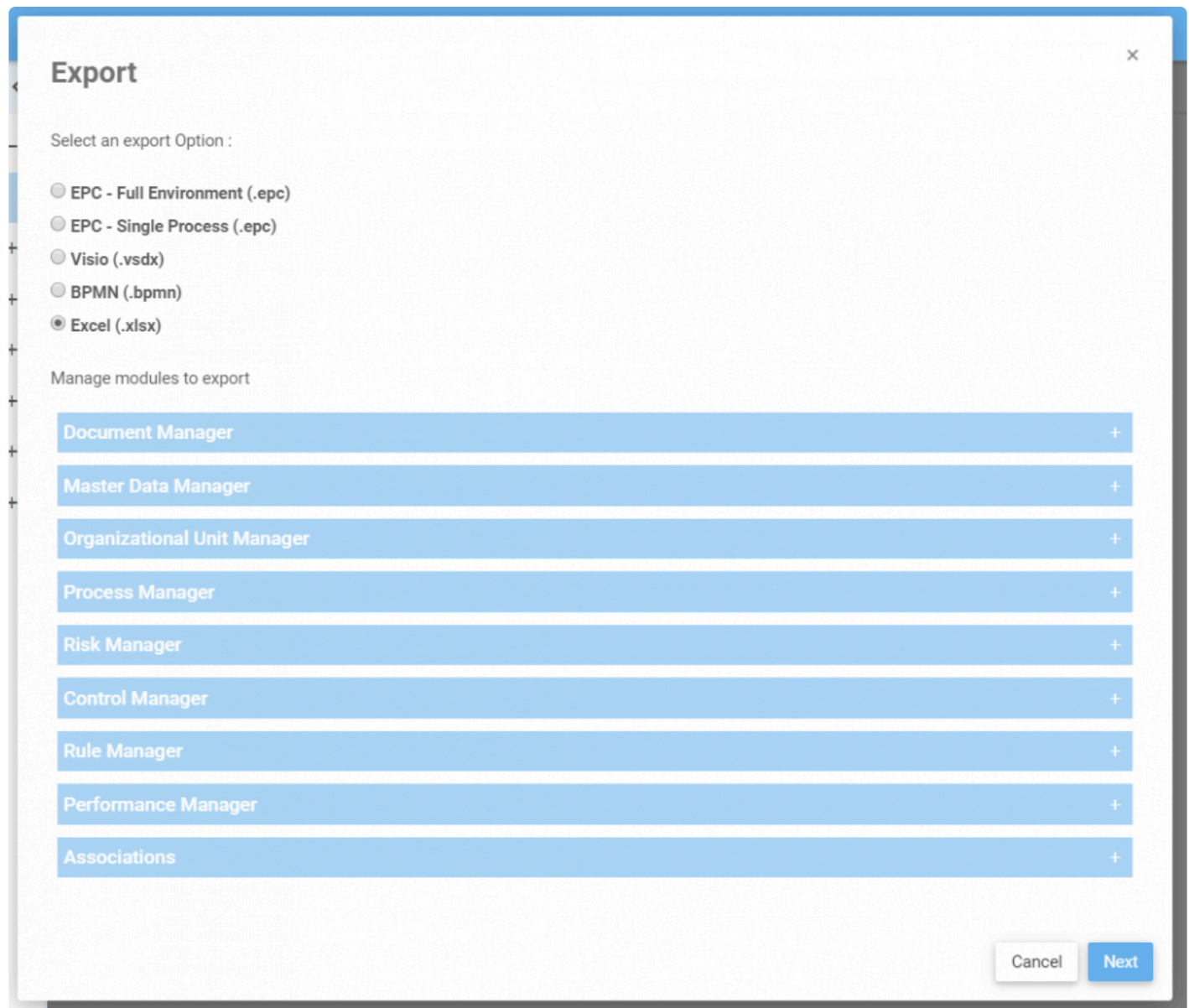
3. You will see options to export content from each module. To select an object to export, expand the desired section by clicking on the **+** within a section.

4. For each section, select the desired objects to export.

Manage modules to export

Document Manager	+
Master Data Manager	+
Organizational Unit Manager	−

1 Select objects to export   ☐ Org Units   ✓ Roles   ✓ Resources   ☐ Assets

2 Select an organizational unit   Type to find an organizational unit   ⊡

3 Name	Type	Status	
Information Systems	Org Unit	Published	×

#	Description
1	You can filter which type(s) of objects to export within an organizational unit. These filters are only available in the Organizational Unit Manager
2	You can type to search for the desired object or select it by using the tree navigator
3	Once an object has been added, they will appear in the list. To remove the item from the list, click on **x** next to the item.

5. Repeat Step 4 for each of the modules

6. Select if you want to include associations. If checked, it will export the object's associations (e.g. documents associated to processes)

Associations	−

Include associations?   ☐

Note: Associations will be exported for all selected objects.

7. Click on **Next**. A final confirmation prompt will appear.

- To finish the export, click on **Export**.
- To go back to the object selection page, click on **Back**
- To cancel the operation, click on **Cancel**
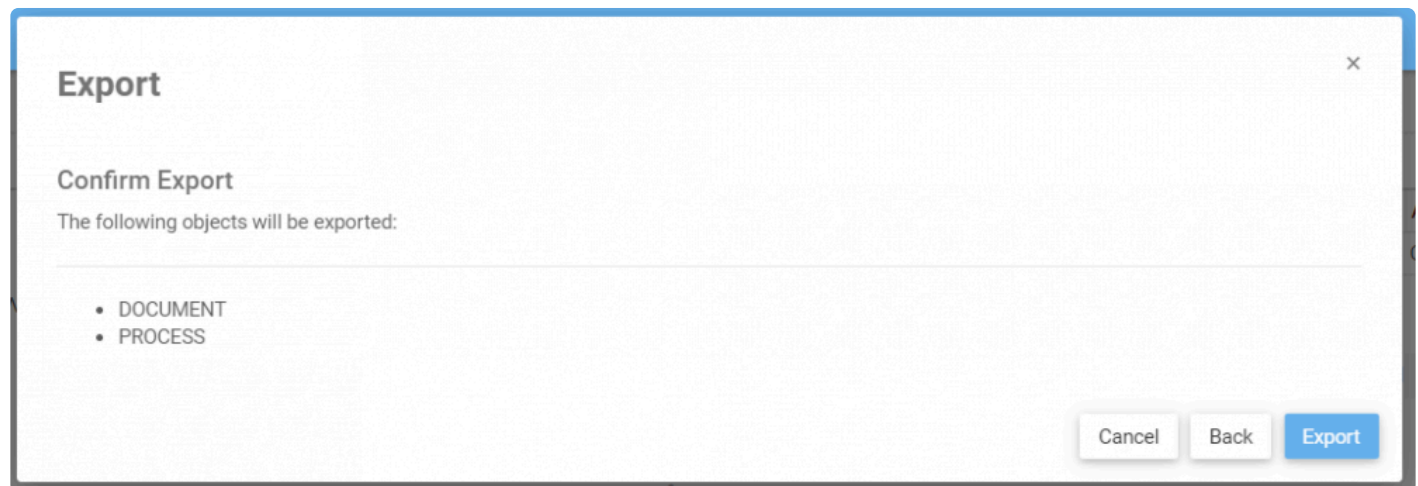
8. You will receive an export notification once it is complete. Click on the notification, then click on the link to download the exported file.
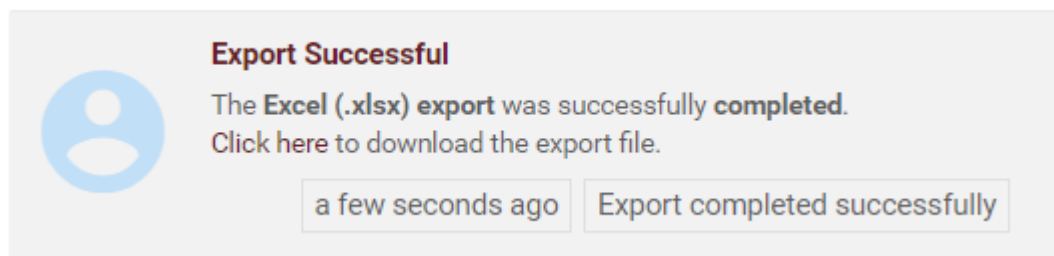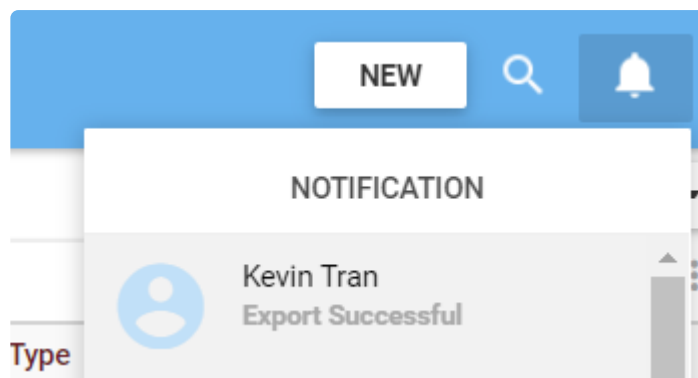
Document Generation Enhacements

When generating a custom process book, users are now able to:

1) Select the auto-layout orientation of the process map in a top-to-bottom or left-to-right configuration
2) Print the process map in swimlanes
3) Reduce the process to a single page

For customers building their own templates, approved Improvement Requests have been added in the payload.

- 12.2.9 Generating a Process Book
- 12.5.1.4.4.1 General Object Tags

12.2.9 Generating a Process Book

After creating and uploading custom templates, users are able to generate a process book based on the template they have selected. The template will be populated based on the process the user generates the process book on. The process book will then be downloaded on your computer in a Word Document (.docx) format.

To generate a process book:

1. Navigate to a process. In the details or graph view, click on the Process Book icon located on the toolbar.

2. The template selection prompt will appear:

Letter	Column	Description
A	Checkbox	Selects the template
B	Preview	Preview the template in a pop-up view
C	Name	The name of the template

D	Category	Categories assigned to the template
E	Subtype	Types assigned to the template
F	Status	Indicates whether the template is a published or draft version
G	Auto Layout Orientation	Prints the process map using a left-to-right or top-to-bottom auto layout configuration
H	Include all children	Includes all subprocesses in a drilldown*
I	Print Map in Swimlane	Prints the process map in swimlane mode
J	Reduce Map Image to Single Page	Shrinks the process map to fit in 1 page

3. Select the desired template and click "Done"

4. The prompt will close, and the document will be downloaded to your computer

> ✳ If the size of the process is big, there may be a delay for the download.

Include all Children

If you wish to generate a muti-level process book, select this option. The resulting output will include all sub-processes of n-levels. Given the following process:

🌐 2 Manufacturing

    ▤ 2.1 Process Raw Materials

        ▤ 2.1.4 Item Check

    ▤ 2.2 Manufacture Product

    ▤ 2.3 Receive Raw Materials

	Exclude Children	Include Children
Processes included	2 Manufacturing	2 Manufacturing 2.1 Process Raw Materials 2.1.4 Item Check 2.2 Manufacture Product

		2.3 Receive Raw Materials

12.5.1.4.4.1 General Object Tags

High Level Tags

Note that all examples in this page must be written inside a loop/section for objects or templaterConfig/ subject

For example, if you want to access data within the "object" object:

objects:
```
{#objects}{#object} {name} {/object}{/objects}
```

templaterConfig/subject:
```
{#templaterConfig}{#subject}{#object} {name} {/object}{/subject}{/templaterConfig}
```

The same concept is applicable to the other 6 elements (version, properties, etc). They must be written inside a loop/section for objects or templaterConfig/subject

Object

The "object" object contains the base information and associations of the object. The properties and attributes of this object will depend on the type (for example, "defaultView" is an attribute specific to process). For tags relating to each EPC Object, refer to the page specific to that EPC Object.

All tags under this header (including associations – risks, rules, etc) must be within a section for object:

```
{#object} {name} {/object}
```

Tag	Description
{nodeType}	The type of node
{name}	The name of the object
{version}	The version of the object
{creationDate}	The date and time the object was created
{modificationDate}	The date and time the object was last modified

{nodeStatus}	Status of the object (published vs in progress)
{checkinDate}	The date and time when the object was published
{checkinComment}	The comment associated with the publication for the object
{referenceNumber}	The object's unique identifier
{#parent}{name}{/parent}	Name of the object's parent
{#checkinBy}{username}{/checkinBy}	Username of the user who last published the object
{#checkinBy}{firstName}{/checkinBy}	First name of the user who last published the object
{#checkinBy}{middleName}{/checkinBy}	Middle name of the user who last published the object
{#checkinBy}{lastName}{/checkinBy}	Last name of the user who last published the object
{#checkinBy}{name}{/checkinBy}	Full name & username of the user who last published the object
{#checkinBy}{email}{/checkinBy}	Email of the user who last published the object
{#checkinBy}{phone}{/checkinBy}	Phone Number of the user who last published the object
{checkinComment}	Comment made by the publisher of the object (current version)

Associated Roles & Responsibilities Tags

The tags in the table below are tags common across org units, resources, assets and roles.

Each of the tags above must be included within the appropriate loop

- Roles: {#roles}{/roles}
- Org Units: {#orgUnits}{/orgUnits}
- Resources: {#resources}{/resources}
- Assets: {#assets}{/assets}

✳ The loop must be inside the object section

```
{#object}{#roles}{#target} {name} {/target}{/roles}{/object}
```

Tag	Description
{#target}{name}{/target}	Name of the org unit, role, asset or resource
{#target}{version}{/target}	Version of the org unit, role, asset or resource
{#target}{nodeType}{/target}	The type of the object (role, resource, asset, org unit)

{#target}{creationDate}{/target}	Date of creation of the org unit, role, asset or resource
{#target}{modificationDate}{/target}	Last modification date of the org unit, role, asset or resource
{#target}{nodeSubTypeName}{/target}	The type of org unit, role, asset or resource
{#target}{nodeStatus}{/target}	The status of the org unit, role, asset or resource (in progress vs published)
{#target}{checkinDate}{/target}	The date of publication of the org unit, role, asset or resource
{#target}{#checkinBy}{username}{/checkinBy}{/target}	The username of the user who last published the object
{#target}{#checkinBy}{firstName}{/checkinBy}{/target}	The first name of the user who last published the object
{#target}{#checkinBy}{middleName}{/checkinBy}{/target}	The middle name of the user who last published the object
{#target}{#checkinBy}{lastName}{/checkinBy}{/target}	The last name of the user who last published the object
{#target}{#checkinBy}{name}{/checkinBy}{/target}	The full name and username of the user who last published the object
{#target}{#checkinBy}{email}{/checkinBy}{/target}	The email of the user who last published the object
{#target}{#checkinBy}{phone}{/checkinBy}{/target}	The phone number of the user who last published the object
{#target}{reviewFrequency}{/target}	The set review frequency of the org unit, role, asset or resource
{#target}{nextReviewDate}{/target}	The next review date of the org unit, role, asset or resource
{#target}{#categories}{name}{/categories}{/target}	The categories in which the object is grouped in
{responsible}	Boolean value for Responsible (RASCI-VS)
{accountable}	Boolean value for Accountable (RASCI-VS)
{support}	Boolean value for Support (RASCI-VS)
{consulted}	Boolean value for Consulted (RASCI-VS)
{informed}	Boolean value for Informed (RASCI-VS)
{verifier}	Boolean value for Verifier (RASCI-VS)
{signatory}	Boolean value for Signatory (RASCI-VS)

Associated Documents Tags

These tags can be used to display information about any documents associated to the object. The tags in the section below must be included in a loop for documents:

> ✳ The loop must be inside the object section

```
{#object}{#documents}{#target} {name} {/target}{/documents}{/object}
```

Tag	Description
{#target}{nodeType}{/target}	The type of object (document)
{#target}{name}{/target}	The name of the document
{#target}{version}{/target}	The version of the document
{#target}{creationDate}{/target}	The creation date of the document
{#target}{modificationDate}{/target}	The last modification date of the document
{#target}{nodeSubTypeName}{/target}	The type of document
{#target}{nodeStatus}{/target}	The status of the document (in progress vs published)
{#target}{referenceNumber}{/target}	The document's unique identifier
{#target}{checkinDate}{/target}	The date the document was published
{#target}{#checkinBy}{username}{/checkinBy}{/target}	The username of the user who last published the document
{#target}{#checkinBy}{firstName}{/checkinBy}{/target}	The first name of the user who last published the document
{#target}{#checkinBy}{middleName}{/checkinBy}{/target}	The middle name of the user who last published the document
{#target}{#checkinBy}{lastName}{/checkinBy}{/target}	The last name of the user who last published the document
{#target}{#checkinBy}{name}{/checkinBy}{/target}	The full name and username of the user who last published the document
{#target}{#checkinBy}{email}{/checkinBy}{/target}	The email of the user who last published the document
{#target}{#checkinBy}{phone}{/checkinBy}{/target}	The phone number of the user who last published the document
{#target}{reviewFrequency}{/target}	The set review frequency of the document

{#target}{nextReviewDate}{/target}	The next review date of the document
{#target}{#categories}{name}{/categories}{/target}	The category under which the document is grouped under
{#target}{documentType}{/target}	The type of document (URL, file, template, file link)
{#target}{url}{{/target}	The URL of the document (only for URL and file link types)
{#target}{#fileInfo}{name}{/fileInfo}{/target}	The name of the uploaded file (only for file uploads and templates)
{#target}{#fileInfo}{extension}{/fileInfo}{/target}	The extension of the file (only for file uploads and templates)

Associated Risks Tags

These tags can be used to display information about any risks associated to the process. The tags in the section below must be included in a loop for risks:

✳ The loop must be inside the object section

```
{#object}{#risks}{#target} {name} {/target}{/risks}{/object}
```

Tag	Description
{#target}{name}{/target}	Name(s) of the risk(s) associated to the process
{#target}{nodeType}{/target}	The type of the object (risk)
{#target}{version}{/target}	The version of the risk
{#target}{creationDate}{/target}	The date of creation of the risk
{#target}{modificationDate}{/target}	The last modification date of the risk
{#target}{nodeSubType}{/target}	The type assigned to the risk (user defined)
{#target}{nodeStatus}{/target}	The status of the risk (in progress vs published)
{#target}{referenceNumber}{/target}	The risk's unique identifier
{#target}{checkinDate}{/target}	The risk's date of publication
{#target}{#checkinBy}{username}{/checkinBy}{/target}	Username of the user who last published the risk
{#target}{#checkinBy}{firstName}{/checkinBy}{/target}	First name of the user who last published the risk
{#target}{#checkinBy}{middleName}{/checkinBy}{/target}	Middle name of the user who last published the risk
{#target}{#checkinBy}{lastName}{/checkinBy}{/target}	Last name of the user who last published the risk

{#target}{#checkinBy}{name}{/checkinBy}{/target}	Full name & username of the user who last published the risk*
{#target}{#checkinBy}{email}{/checkinBy}{/target}	Email of the user who last published the risk
{#target}{#checkinBy}{phone}{/checkinBy}{/target}	Phone Number of the user who last published the risk
{#target}{grossImpact}{/target}	Gross impact of the risk
{#target}{grossLikelihood}{/target}	Gross likelihood of the risk
{#target}{grossDetectability}{/target}	Gross detectability of the risk
{#target}{residualImpact}{/target}	Residual impact of the risk
{#target}{residualLikelihood}{/target}	Residual likelihood of the risk
{#target}{residualDetectability}{/target}	Residual detectability of the risk
{#target}{overrideRollup}{/target}	Boolean value for whether the risk values are overriden
{#target}{analysisJustification}{/target}	Analysis justification for the risk
{#target}{#causalities}{cause}{/causalities}{/target}	Cause of the risk (Cause & Effect)
{#target}{#causalities}{effect}{/causalities}{/target}	Effect of the risk (Cause & Effect)
{residualScore}	The residual score after controls have been factored in
{residualPriority}	The level (numerical) of residual priority
{residualPriorityText}	The level (textual) of residual priority (medium, high, etc)
{residualPercentage}	The residual percentage of the risk
{reviewFrequency}	The set review frequency for the risk
{nextReviewDate}	The next review date for the risk
{#processControls}{controlName}{/processControls}	The name of the control associated with the risk
{#processControls}{impact}{/processControls}	The impact of the control on the risk
{#processControls}{likelihood}{/processControls}	The likelihood of the control on the risk
{#processControls}{detectability}{/processControls}	The detectability of the control on the risk
{#processControls}{priority}{/processControls}	The priority of the control on the risk
{#processControls}{score}{/processControls}	The score of the control on the risk
{#processControls}{percentage}{/processControls}	The percentage of gross risk for the control
{#processControls}{priorityText}{/processControls}	The priority level (textual) of the control (medium, high, etc)

| {#processControls}{excluded}{/processControls} | Whether the control is excluded from the risk or not |

Associated Controls Tags

These tags can be used to display information about any controls associated to the process. The tags in the section below must be included in a loop for controls:

✳ The loop must be inside the object section

`{#object}{#controls}{#target} {name} {/target}{/controls}{/object}`

Tag	Description
{#target}{name}{/target}	The name of the control
{#target}{nodeType}{/target}	The type of the object (control)
{#target}{version}{/target}	The version of the control
{#target}{creationDate}{/target}	The creation date of the control
{#target}{modificationDate}{/target}	The last modification of the control
{#target}{nodeSubTypeName}{/target}	The assigned type of the control
{#target}{nodeStatus}{/target}	The status of the control (in progress vs published)
{#target}{referenceNumber}{/target}	The control's unique identifier
{#target}{checkinDate}{/target}	The date of the control's last publication
{#target}{#checkinBy}{username}{/checkinBy}{/target}	The username of the user who last published the control
{#target}{#checkinBy}{firstName}{/checkinBy}{/target}	The first name of the user who last published the control
{#target}{#checkinBy}{middleName}{/checkinBy}{/target}	The middle name of the user who last published the control
{#target}{#checkinBy}{lastName}{/checkinBy}{/target}	The last name of the user who last published the control
{#target}{#checkinBy}{name}{/checkinBy}{/target}	The full name and username of the user who last published the control
{#target}{#checkinBy}{email}{/checkinBy}{/target}	The email of he user who last published the control
{#target}{#checkinBy}{phone}{/checkinBy}{/target}	The phone number of the user who last published the control
{#target}{checkinComment}{/target}	The comment attached to the last publication action

{#target}{reviewFrequency}{/target}	The set review frequency for the control
{#target}{nextReviewDate}{/target}	The next review date for the control
{#target}{#categories}{name}{/categories}{/target}	The name of category(ies) under which the control is grouped under
{#target}{keyControl}{/target}	Boolean value for whether the control is a key control
{#target}{frequency}{/target}	The frequency classification of the control
{#target}{effectStyle}{/target}	Preventive or detective control
{#target}{operationType}{/target}	Manual or computer control
{#target}{itControl}{/target}	Boolean value for whether the control is an IT control or not
{#target}{itControlType}{/target}	The type of IT control
{#target}{itAssertionCompleteness}{/target}	IT control assertion – boolean value for completeness
{#target}{itAssertionAccuracy}{/target}	IT control assertion – boolean value for accuracy
{#target}{itAssertionValidity}{/target}	IT control assertion – boolean value for validity
{#target}{itAssertionAuthorization}{/target}	IT control assertion – boolean value for authorization
{#target}{internalEnvironment}{/target}	COSO component – boolean value for internal environment
{#target}{objectiveSetting}{/target}	COSO component – boolean value for objective setting
{#target}{eventIdentification}{/target}	COSO component – boolean value for event identification
{#target}{riskAssessment}{/target}	COSO component – boolean value for risk assessment
{#target}{riskResponse}{/target}	COSO component – boolean value for risk response
{#target}{informationCommunication}{/target}	COSO component – boolean value for information & communication
{#target}{monitoring}{/target}	COSO component – boolean value for monitoring
{#target}{controlActivities}{/target}	COSO component – boolean value for control activities
{#target}{controlActivityType}{/target}	COSO component – control activity type
{#target}{existenceOccurrence}{/target}	Financial Assertion – boolean value for existence & occurence
{#target}{completeness}{/target}	Financial Assertion – boolean value for completeness
{#target}{rightsObligations}{/target}	Financial Assertion – boolean value for rights &

	obligations
{#target}{presentationDisclosure}{/target}	Financial Assertion – boolean value presentation & disclosure
{#target}{valuationAllocation}{/target}	Financial Assertion – - boolean value for valuation & allocation
{#target}{accuracy}{/target}	Financial Assertion – boolean value under Value & Allocation for accuracy
{#target}{classification}{/target}	Financial Assertion – boolean value under Value & Allocation for classification
{#target}{timingCutOff}{/target}	Financial Assertion – boolean value under Value & Allocation for timing or cut-off
{#target}{postingSummarization}{/target}	Financial Assertion – boolean value under Value & Allocation for posting & summarization
{#target}{detailTieIn}{/target}	Financial Assertion – boolean value under Value & Allocation for detail tie-in
{#target}{realizableValue}{/target}	Financial Assertion – boolean value under Value & Allocation for realizable value
{#target}{balanceSheet}{/target}	Financial Statements Impacted – Balance Sheet
{#target}{retainedEarnings}{/target}	Financial Statements Impacted – Retained Earnings
{#target}{incomeStatement}{/target}	Financial Statements Impacted – Income Statement
{#target}{financialStatement}{/target}	Financial Statements Impacted – Financial Statement

Associated Rules Tags

These tags can be used to display information about any rules associated to the process. The tags in the table below must be included in a loop for rules:

> ✳ The loop must be inside the object section

```
{#object}{#rules}{#target} {name} {/target}{/rules}{/object}
```

Tag	Description
{#target}{nodeType}{/target}	The type of object (rule)
{#target}{name}{/target}	The name of the rule
{#target}{version}{/target}	The version of the rule

{#target}{creationDate}{/target}	The creation date of the rule
{#target}{modificationDate}{/target}	The last modification date of the rule
{#target}{nodeSubTypeName}{/target}	The assigned type of the rule
{#target}{nodeStatus}{/target}	The status of the rule (in progress vs published)
{#target}{referenceNumber}{/target}	The rule's unique identifier
{#target}{checkinDate}{/target}	The date of publication of the rule
{#target}{#checkinBy}{username}{/checkinBy}{/target}	The username of the user who last published the rule
{#target}{#checkinBy}{firstName}{/checkinBy}{/target}	The first name of the user who last published the rule
{#target}{#checkinBy}{middleName}{/checkinBy}{/target}	The middle name of the user who last published the rule
{#target}{#checkinBy}{lastName}{/checkinBy}{/target}	The last name of the user who last published the rule
{#target}{#checkinBy}{name}{/checkinBy}{/target}	The full name and username of the user who last published the rule
{#target}{#checkinBy}{email}{/checkinBy}{/target}	The email of he user who last published the rule
{#target}{#checkinBy}{phone}{/checkinBy}{/target}	The phone number of the user who last published the rule
{#target}{reviewFrequency}{/target}	The set review frequency for the rule
{#target}{nextReviewDate}{/target}	The next review date for the control
{#target}{#categories}{name}{/categories}{/target}	The name of the category(ies) in which the rules are grouped under
{#target}{source}{/target}	The source of the rule
{#target}{history}{/target}	The history of the rule
{#target}{example}{/target}	The example provided for the rule

Associated Objective, Performance, Control & Risk Indicators Tags

The tags below are common to objective, performance, control and risk indicators

Each of these tags must be included in a loop for the desired object:

> ✳ The loop must be inside the object section

- {#objectives}{/objectives} – for objectives
- {#controlIndicators}{/controlIndicators} – for KCI

- {#performanceIndicators}{/performanceIndicators} – for KPI
- {#riskIndicators}{/riskIndicators} – for KRI

```
{#object}{#controlIndicators}{#target} {name} {/target}{/controlIndicators}{/obj
ect}
```

Tag	Description
{#target}{name}{/target}	The name of the indicator
{#target}{version}{/target}	The version of the indicator
{#target}{creationDate}{/target}	The creation date of the indicator
{#target}{modificationDate}{/target}	The last modification date of the indicator
{#target}{nodeSubTypeName}{/target}	The assigned type of the indicator
{#target}{status}{/target}	The status of the indicator (in progress vs published)
{#target}{referenceNumber}{/target}	The indicator's unique identifier
{#target}{checkinDate}{/target}	The publication date of the indicator
{#target}{#checkinBy}{username}{/checkinBy}{/target}	The username of the user who last published the indicator
{#target}{#checkinBy}{firstName}{/checkinBy}{/target}	The first name of the user who last published the indicator
{#target}{#checkinBy}{middleName}{/checkinBy}{/target}	The middle name of the user who last published the indicator
{#target}{#checkinBy}{lastName}{/checkinBy}{/target}	The last name of the user who last published the indicator
{#target}{#checkinBy}{name}{/checkinBy}{/target}	The full name and username of the user who last published the indicator
{#target}{#checkinBy}{email}{/checkinBy}{/target}	The email of the user who last published the indicator
{#target}{#checkinBy}{phone}{/checkinBy}{/target}	The phone number of the user who last published the indicator
{#target}{checkinComment}{/target}	The comment made at the time of the last publication
{#target}{#categories}{name}{/categories}{/target}	The name of the category(ies) under which the indicator is grouped under
{#target}{indicatorType}{/target}	The type of indicator (not compatible with objectives)

{#target}{thresholdTarget1}{/target}	The first threshold of the indicator (not compatible with objectives)
{#target}{thresholdTarget2}{/target}	The second threshold of the indicator* (not compatible with objectives)
{#target}{thresholdTarget3}{/target}	The third threshold of the indicator (not compatible with objectives)
{#target}{thresholdTarget4}{/target}	The fourth threshold of the indicator (not compatible with objectives)
{#target}{unit}{/target}	(not compatible with objectives)
{#target}{measureDate}{/target}	The last measurement date for the indicator (not compatible with objectives)
{#target}{measureValue}{/target}	The last measurement value for the indicator (not compatible with objectives)
{#target}{#performanceScore}{score}{/performanceScore}{/target}	The performance score of the indicator (not compatible with objectives)
{#target}{#performanceScore}{color}{/performanceScore}{/target}	The current color of the indicator (not compatible with objectives)

> ✳ *If the indicator only has 2 threshold values, the 2nd value will be thresholdTarget2, while 3 and 4 will be null.

Master Data Tags (Entities & Attributes)

These tags can be used to display information about any master data objects associated to the process. These tags are applicable to both entities and attributes

Each of the tags above must be included in a loop for the desired object:

- {#entities}{/entities} – for entities
- {#attributes}{/attributes} – for attributes

> ✳ The loop must be inside the object section

{#object}{#entities}{#target} {name} {/target}{/entities}{/object}

Tag	Description

{#target}{nodeType}{/target}	The type of object (entity or attribute)
{#target}{version}{/target}	The version of the object
{#target}{creationDate}{/target}	The creation date of the object
{#target}{modificationDate}{/target}	The last modification date of the object
{#target}{nodeSubTypeName}{/target}	The assigned type of the object
{#target}{nodeStatus}{/target}	The status of the object (in progress vs published
{#target}{referenceNumber}{/target}	The object's unique identifier
{#target}{checkinDate}{/target}	The date the object was published
{#target}{#checkinBy}{username}{/checkinBy}{/target}	The username of the user who last published the object
{#target}{#checkinBy}{firstName}{/checkinBy}{/target}	The first name of the user who last published the object
{#target}{#checkinBy}{middleName}{/checkinBy}{/target}	The middle name of the user who last published the object
{#target}{#checkinBy}{lastName}{/checkinBy}{/target}	The last name of the user who last published the object
{#target}{#checkinBy}{name}{/checkinBy}{/target}	The full name and username of the user who last published the object
{#target}{#checkinBy}{email}{/checkinBy}{/target}	The email of the user who last published the object
{#target}{#checkinBy}{phone}{/checkinBy}{/target}	The phone number of the user who last published the object
{create}	Boolean value for the object's Create permission (CRUD)
{read}	Boolean value for the object's Read permission (CRUD)
{update}	Boolean value for the object's Update permission (CRUD)
{delete}	Boolean value for the object's Delete permission (CRUD)

Descriptions

Descriptions can be inserted for an object in EPC. The tags for descriptions are as follows:

```
@@richTextDescription:{nodeId}@@
```

The tag must be inserted in the appropriate loop/section. For example, if you want to print the description of

a rule associated to an EPC object, you would need to write the following:

```
{#objects} //open a loop for the objects array
{#object} //open a section for the object
{#rule}{#target} //specify that you want the rule associated to the object
@@richTextDescription:{nodeId}@@ //nodeId will be replaced with the ID of the rul
e and its description will be inserted
{/target}{/rule} //close the section/loop for rules
{/object} //close the section for the object
{/objects} //end the loop through the objects array
```

The description of objects is dependent on the Node ID. You must ensure to insert the tag in the appropriate section.

* Descriptions will not work within tables in Word.

* The printed descriptions will take on Word's default font. To change the default font, please refer to Microsoft Office's official website.

Versions

This array may contain multiple objects for each version (e.g. if a rule has 5 published versions, the array will contain 5 objects, one corresponding to each version). Tags in this section must be included in a loop using the "versions" array:

All tags under this header must be within a loop for versions:

```
{#versions}  {version}  {/versions}
```

Tag	Description
{version}	The version of the object
{checkinDate}	The publication date of the object
{checkinBy}	An object containing information on the user who published the object
{#checkinBy}{username}{/checkinBy}	The username of the user who published the object
{#checkinBy}{firstName}{/checkinBy}	The first name of the user who published the object
{#checkinBy}{middleName}{/checkinBy}	The middleName of the user who published the object

{#checkinBy}{lastName}{/checkinBy}	The lastName of the user who published the object
{#checkinBy}{name}{/checkinBy}	The name of the user who published the object (FName LName (username))
{#checkinBy}{email}{/checkinBy}	The email of the user who published the object
{#checkinBy}{phone}{/checkinBy}	The phone of the user who published the object

Approval Entries

The approvalEntries array contains the approval cycles done on an object. This array may contain multiple objects per approval cycle.

All tags under this header must be within a loop for approval entries:

{#approvalEntries}{#user}{username}{/user}{/approvalEntries}

Tag	Description
{#target}{nodeType}{/target}	The type of object being reviewed
{#target}{name}{/target}	The name of the object being reviewed
{#user}{username}{/user}	The username of the user who approved/rejected the cycle
{#user}{username}{/user}	The username of the user who approved/rejected the cycle
{#user}{username}{/user}	The username of the user who approved/rejected the cycle
{#user}{username}{/user}	The username of the user who approved/rejected the cycle
{#user}{username}{/user}	The username of the user who approved/rejected the cycle
{#user}{username}{/user}	The username of the user who approved/rejected the cycle
{#user}{username}{/user}	The username of the user who approved/rejected the cycle
{comment}	The comment associated with the approval cycle
{status}	The status of the approval cycle (approved/rejected)
{entryTime}	The time of approval/rejection
{chainType}	The type of approval cycle (serial/parallel)

Properties

The properties array contain all the UDAs of the object. Each object within the array corresponds to 1 UDA. Tags in this section must be included within a loop using "properties":

```
{#properties} {attributeName}: {attributeValueText} {/properties}
```

Tag	Description
{attributeName}	The name of the attribute
{attributeValueText}	The text or number value of single value attributes
{mandatory}	Boolean for whether the attribute is mandatory
{type}	The type of UDA (Duration, Number, Text, Multi List, Currency)
{listItems}	Array for values of the UDA for Multi List attributes
{#listItems}{indexOrder}{/listItems}	The index order of the multi-value attribute
{#listItems}{defaultSelection}{/listItems}	Boolean indicating if this UDA is mandatory
{#listItems}{name}{/listItems}	The selected value(s) of the UDA

Impact

The impacts object contains the impacts of an EPC Object. In this case, the impact list will leave out direct associations since they are already present in the object. For example, roles associated to a risk will not appear in this section, but processes associated to the risk will. There is one array per EPC object type within this section.

```
"impact": {
    "processes": [],
    "flowObjects": [],
    "materials": [],
    "documents": [],
    "orgUnits": [],
    "roles": [],
    "resources": [],
    "assets": [],
    "objectives": [],
    "controlIndicators": [],
    "performanceIndicators": [],
    "riskIndicators": [],
    "rules": [],
    "risks": [],
    "controls": [],
    "entities": [ ▦ ],
    "attributes": []
},
```

Tags in this table must be included in the "impact" section then looped through the appropriate object type:

```
{#impact}{#processes} {name} {/processes}{/impact}
```

Object types include:

- Process: {#processes}…{/processes}
- Flow Objects: {#flowObjects}…{/flowObjects}
- Materials: {#materials}…{/materials}
- Documents: {#documents}…{/documents}
- Org Units: {#orgUnits}…{/orgUnits}
- Roles: {#roles}…{/roles}
- Resources: {#resources}…{/resources}
- Assets: {#assets}…{/assets}
- Objectives: {#objectives}…{/objectives}
- KCIs: {#controlIndicators}…{/controlIndicators}
- KPIs: {#performanceIndicators}…{/performanceIndicators}

- KRIs: {#riskIndicators}…{/riskIndicators}
- Rules: {#rules}…{/rules}
- Risks: {#risks}…{/risks}
- Controls: {#controls}…{/controls}
- Entities: {#entities}…{/entities}
- Attributes: {#attributes}…{/attributes}

Tag	Description
{nodeType}	The impacted EPC Object type
{name}	The name of the impacted EPC Object
{nodeStatus}	The status (published vs in progress) of the impacted EPC Object
{parent}	Object of the parent of the impacted EPC Object
{#parent}{name}{/parent}	The name of the parent
{#parent}{nodeType}{/parent}	The object type of the parent

Improvement Requests

The improvement request array will contain IR's raised on the particular EPC Object. Note that only IRs that are "To Implement" will appear in this array.

All tags in the table below must be included in a section for Improvement Requests:
{#improvementRequests} …{subject}… {/improvementRequests}

Tag	Description
{#author}{username}{/author}	The username of the IR author
{#author}{firstName}{/author}	The first name of the IR author
{#author}{lastName}{/author}	The flast name of the IR author
{#author}{middleName}{/author}	The middle name of the IR author
{#author}{name}{/author}	The full name + username of the IR author
{#author}{email}{/author}	The email name of the IR author
{#author}{phone}{/author}	The phone name of the IR author
{#target}{nodeType}{/target}	The type of object the IR was raised on
{#target}{name}{/target}	The name of the object the IR was raised on

{nodeStatus}	The status (published vs in progress) of the impacted EPC Object
{postDate}	The IR's date of posting
{subject}	The IR's subject line
{postType}	The collaboration type (IMPROV_REQ in this case)
{systemId}	The IR's unique identifier (the format will follow IR-YYYY-## where YYYY is the year and ## is the number of the IR
{status}	The current status of the IR
{priority}	The priority of the IR
{impact}	The impact of the IR
{value}	The value of the IR
{numberOfReplies}	The number of replies on the IR
{#fileInfos}{name}{/fileInfos}	The name of the attached file
{#fileInfos}{contentLength}{/fileInfos}	The file size (in bytes) of the attached file
{#fileInfos}{extension}{/fileInfos}	The extension of the attached file (.docx, .jpeg, .png, etc)
{description}	The description of the IR
{#children}…{/children}	Replies to the IR*

✳ For replies of the improvement request, insert the tags in the table above within {#children}…{/children}

Reporting Enhancements

Interfacing's V11.5 release has enhanced your EPC's reporting capabilities. Admin changes are now fully reportable using EPC's reporting suite Cognos.

Your management group can now track any changes made by administrators and generate business intelligence reports highlighting the changes made throughout the system administration.

Known Issues

The following Known Issues have been included in our 11.5 release.

Ticket Number	Description	Workaround
BPCA-11865	Material importation (.bpmn)	You will have to remove any materials or transition annotations prior to .bpmn importation
BPCA-11683	Content Translation	Interfacing's integrated content translation is limited to 3,000 characters are one time. Simply translate items within in multiple steps (chunking) to translate large description exceeding this limit.
BPCA-11521	Arabic letters not wrapping properly	Give the flow object a short name and add the rest in the description
BPCA-11417	Indentation in Object/Process books not working properly	Do not use the EPC's built in indentation. Manually create the spaces, or adjust the indentation manually in the outputted Word document

Resolved Issues

The following issues have been resolved in the latest product release. For further information or support issues concerning EPC, please contact support through:
[Support portal](#) or email support@interfacing.com.

Issue Types

- System Administration
- Approvals and Collaboration
- Import / Export

System Administration

Ticket Number	Description
BPCA-11967	Cannot purge environment's with SSO activated
BPCA-11354	Restore capabilities previously restricted when latest version was 'Under Review'
BPCA-9723	Cannot delete environments when user searches the environment

Approvals & Confirmations

Ticket Number	Description
BPCA-11872	Unable to edit objects in the Web App after closing an improvement request
BPCA-11768	Certain email notifications not sent to approvers throughout approval cycles
BPCA-11735	Unable to adjust Improvement Request status after attaching file to collaboration post

Import / Export

Ticket Number	Description
BPCA-11782	Importation fails for extended descriptions
BPCA-11646	.bpmn export failing when the process map features Link type End Events
BPCA-11148	Cannot use .epc export on low-resolution screens
BPCA-11646	Export BPMN fails when end event is of type "Link"

Document Generation

Ticket Number	Description
BPCA-11585	Process Book – children are displayed alphabetically instead of by sequence number

General Edit/Navigation

Ticket Number	Description
BPCA-10980	Input/Output duplication
BPCA-11892	Unable to save process map after editing boundary events
BPCA-11941	Document becomes inaccessible in published only mode if it is in approval
BPCA-11945	Properties information not included in Show Changes
BPCA-11100	Input/Output position reset in Published mode
BPCA-10850	Cannot switch content language while in map edit
BPCA-9665	Transitions angled/distorted on publication
BPCA-10709	Simple BPMN displaying incorrectly for events
BPCA-11616	Unable to save the map in edit mode when clicking on "Cancel" on parent's detail page

Notifications

Ticket Number	Description
BPCA-10811	No notifications when minor version is published

Search

Ticket Number	Description
BPCA-11703	Elastic Search – Cannot search by Identifier

Widgets

Ticket Number	Description
BPCA-11888	Cannot sort by sub-type for widgets
BPCA-11985	Empty Data for newly created widgets

11.5 Release Videos

For more interactive videos on the release's new features, please refer to the videos in the playlist below:

Click here for 11.5 Release Videos