









Realized Resource Exchange wizard

To open the **Realized Resource Exchange** wizard

- In the [SV-1](#), [SV-2](#) (DoDAF) diagrams:
 - On the diagram pane, select the Association and on the smart manipulator toolbar, click .
 - Click  and on the diagram pane, connect Resources.
 - Click the Control relationship and connect Posts or Organizations with Posts, Organizations, Natural Resources, Software, Resource Artifact, Technology.
 - Click the Command relationship and connect Posts, Organizations.
- In the [SV-1 Internal](#), [SV-2 Internal](#) (DoDAF):
 - On the diagram pane, select the Resource Connector and on the smart manipulator toolbar, click .
 - On the diagram palette, click  and then click the Resource Connector.
- In the [SV-4](#) Flow (DoDAF) diagram:
 - On the diagram pane, select Function Control Flow or Function Object Flow and on the smart manipulator toolbar click .
 - On the diagram palette, click  and then click Function Control Flow or Function Object Flow.
- In the [SV-10c](#) (DoDAF) diagram:
 - On the diagram pane, select the Resource Message and on the smart manipulator toolbar, click .
 - On the diagram palette, click  and then click the Resource Message.
- In the [SV-3](#), [SvcV-3a](#), [SvcV-3b](#) (DoDAF) matrix :
 - On the diagram pane, right-click the intersection in the matrix and select **Add New Resource Exchange**.

The **Realized Resource Exchange** wizard includes of two steps:

- 1 [Resource Exchange creation \(mandatory\)](#)
- 2 [Producing and Consuming Functions specification \(optional\)](#)

Resource Exchange creation (mandatory)

This step is designed to create a new Resource Exchange by specifying a conveyed Resource Exchange Item, both sending and receiving Resources, and a direction of a Resource Exchange. Depending on a fact, if selected Resources are known or not, requested information differs:

- If sending and receiving Resources are unknown from the wizard invocation context, you need to specify both.

Realized Resource Exchange

New Resource Exchange

To create a new Resource Exchange, specify the Conveyed Data Item, Resource Exchange Type, Sending and Receiving Resources, Exchange Direction.

1. Create New
or Select Existing
Resource Exchange

2. Specify Producing and
Consuming Functions

Resource Exchange Type: Resource Exchange

Exchange Kind: Resource Communication

Conveyed Item:

Resource Exchange: <NEW>

Sending Resource: Boat

Receiving Resource: MRT Driver

Direction: From Boat To MRT Driver

☐ Add Resource Exchange to corresponding relationships

< Back

Next >

Finish

Cancel

Help

- If sending and receiving Resources are known, they are added to a **Realized Resource Exchange** wizard automatically.

Realized Resource Exchange

New or Existing Resource Exchange

To create a new Resource Exchange, specify the Conveyed Data Item, Resource Exchange Type, and Exchange Direction. You can also select existing Resource Exchange from Drop Down List.

1. Create New
or Select Existing
Resource Exchange

2. Specify Producing and
Consuming Functions

Resource Exchange Type: Resource Exchange

Exchange Kind: Resource Communication

Conveyed Item:

Direction: From Boat To MRT Driver

☐ Add Resource Exchange to corresponding relationships

< Back

Next >




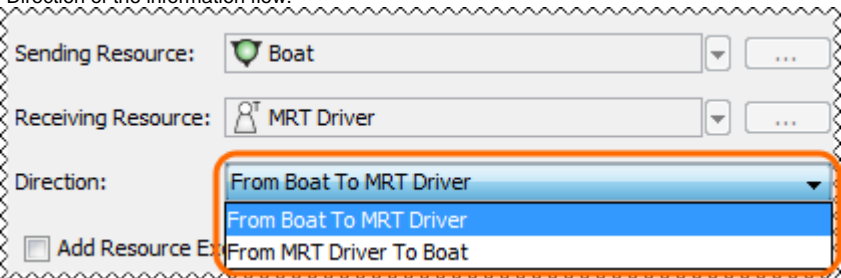

Finish

Cancel

Help

Box	Description
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Exchange Kind	<p>Shows the type of exchanged resources:</p> <ul style="list-style-type: none">• Resource Communication.• Resource Movement.• Resource Energy Flow.• Geo Political Extent Exchange.										
Conveyed Item	<p>One or more Resource Exchange Items that are conveyed by the information flow from the sending Resource to receiving Resource.</p> <table><tr><th>Exchange Kind</th><th>Conveyed Item</th></tr><tr><td>Geo Political Extent Exchange</td><td><ul style="list-style-type: none">• Geo Political Extent Type</td></tr><tr><td>Resource Communication</td><td><ul style="list-style-type: none">• Data Element• Resource Signal</td></tr><tr><td>Resource Energy Flow</td><td><ul style="list-style-type: none">• Natural Resource</td></tr><tr><td>Resource Movement</td><td><ul style="list-style-type: none">• Security Enclave• Resource Mitigation• Capability Configuration• System• Resource Architecture• Natural Resource• Technology• Software• Resource Artifact• Project• Responsibility• Person• Post• Organization• Known Resource</td></tr></table>	Exchange Kind	Conveyed Item	Geo Political Extent Exchange	<ul style="list-style-type: none">• Geo Political Extent Type	Resource Communication	<ul style="list-style-type: none">• Data Element• Resource Signal	Resource Energy Flow	<ul style="list-style-type: none">• Natural Resource	Resource Movement	<ul style="list-style-type: none">• Security Enclave• Resource Mitigation• Capability Configuration• System• Resource Architecture• Natural Resource• Technology• Software• Resource Artifact• Project• Responsibility• Person• Post• Organization• Known Resource
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<p>Resource Exchange</p>	<p>Resource Exchange that specifies an information flow for specified conveyed items.</p> <p>If you select an existing Resource Exchange from the drop-down list, Conveyed Item and Direction boxes will be filled with corresponding information automatically. You will be able to edit values of conveyed items.</p> <p>The direction of the information flow won't be editable.</p> <div data-bbox="456 296 1484 375">  Available if sending and receiving Resources are known from the wizard invocation context. </div> <table border="1" data-bbox="456 396 1114 972"> <thead> <tr> <th>Resource Exchange Type</th><th>Sending and Receiving Resources</th></tr> </thead> <tbody> <tr> <td>Command</td><td> <ul style="list-style-type: none"> • Organization • Person • Post • Responsibility </td></tr> <tr> <td>Control</td><td> <ul style="list-style-type: none"> • Natural Resource • Organizational Resource • Resource Artifact: <ul style="list-style-type: none"> ◦ Capability Configuration ◦ Resource Mitigation ◦ Security Enclave ◦ System </td></tr> <tr> <td>Resource Exchange</td><td> <ul style="list-style-type: none"> • Physical Resource • Resource Architecture • Known Resource </td></tr> </tbody> </table>	Resource Exchange Type	Sending and Receiving Resources	Command	<ul style="list-style-type: none"> • Organization • Person • Post • Responsibility 	Control	<ul style="list-style-type: none"> • Natural Resource • Organizational Resource • Resource Artifact: <ul style="list-style-type: none"> ◦ Capability Configuration ◦ Resource Mitigation ◦ Security Enclave ◦ System 	Resource Exchange	<ul style="list-style-type: none"> • Physical Resource • Resource Architecture • Known Resource
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Resource Exchange	<ul style="list-style-type: none"> • Physical Resource • Resource Architecture • Known Resource 								
<p>Sending Resource</p>	<p>Resource that sends the specified conveyed information.</p> <div data-bbox="456 1039 1484 1119">  Available if a Resource is unknown from the wizard invocation context. </div>								
<p>Receiving Resource</p>	<p>Resource that receives the specified conveyed information.</p> <div data-bbox="456 1207 1484 1287">  Available if a Resource is unknown from the wizard invocation context. </div>								
<p>Direction</p>	<p>Direction of the information flow.</p> <div data-bbox="456 1350 1292 1625">  <p>The screenshot shows a wizard interface with three fields: 'Sending Resource' set to 'Boat', 'Receiving Resource' set to 'MRT Driver', and a 'Direction' dropdown menu. The dropdown menu is open, showing three options: 'From Boat To MRT Driver' (highlighted in blue), 'From Boat To MRT Driver', and 'From MRT Driver To Boat'. An orange rectangle highlights the dropdown menu.</p> </div> <p>After changing the direction from the default one, the sending resource will be switched with the receiving resource. The direction of the Resource Exchange will be changed accordingly.</p> <div data-bbox="456 1719 1484 1854">  In the Direction drop-down list, you can choose the direction of flow, i.e. what type of element is the sender and what type of element is the receiver. The drop-down list is not applicable, if the source and target is the same element and direction could not be specified. </div>								

Add Resource Exchange to corresponding relationships	<p>Select the check box, if you want to add the Resource Exchange to corresponding relationships existing in other related diagrams. These are the relationships that can realize the Resource Exchange:</p> <ul style="list-style-type: none"> - Resource Connector (SV-1 Internal, SV-2 Internal) - Function Control Flow (SV-4) - Function Object Flow (SV-4) - Resource Message (SV-10c) - Association (SV-1, SV-2) - Control (SV-1, SV-2) - Command (SV-1, SV-2) - Intersection in the matrix (SV-3, SvcV-3a , SvcV-3b)
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Producing and Consuming Functions specification (optional)

This step is designed to specify Producing and Consuming Functions for the created or selected Resource Exchange. Resource Exchange are produced and consumed by Activities acting under the Resource.

The dialog box is titled "Realized Resource Exchange" and has a close button (X) in the top right corner. The main heading is "Specify Producing & Consuming Functions". Below the heading, it says: "To specify Producing and Consuming Functions for selected Resource Exchange, select Functions from Drop Down Lists in the table cells." To the right of this text is a graphic showing two yellow diamonds with 'S' inside, connected by a curved line.

On the left side, there are two radio buttons:

- ☐ 1. Create New or Select Existing Resource Exchange
- ☒ 2. Specify Producing and Consuming Functions

On the right side, there is a table with two columns: "Producing Function" and "Consuming Function". Above the table are three buttons: "Add" (with a plus icon), "Remove From Table" (with a minus icon), and "Show Full Paths" (with a double arrow icon). The table contains the following entries:

Producing Function	Consuming Function
Send Message	Receive Message

Below the table is a checkbox labeled "Update Diagrams" which is checked.

At the bottom of the dialog are five buttons: "< Back", "Next >", "Finish", "Cancel", and "Help".

There should always be a pair of functions: one to produce and other to consume information flow.

Related procedures

- [Creating Resource Exchange in P1 diagram](#)
- [Creating Resource Exchange in P2 diagram](#)
- [Creating Resource Exchange in P4 Resource Functions diagram](#)
- [Creating P4 Resource Functions diagram](#)
- [Creating Resource Exchange in P6 diagram](#)
- [Creating Resource Exchange in SvcV-3a matrix](#)
- [Creating Resource Exchange in SvcV-10c diagram](#)
- [Creating Resource Exchanges in SV-1 diagram](#)
- [Creating Resource Exchange in SV-1 Internal diagram](#)
- [Creating Resource Exchange in SV-2 Internal diagram](#)
- [Creating Resource Exchange in SV-2 diagram](#)
- [Creating Resource Exchange in SV-4 Systems Functionality Flow Description diagram](#)
- [Creating Resource Exchange in SV-10c diagram](#)
- [Producing and Consuming Functions dialog](#)
- [Resource Exchange Manager dialog](#)

