



# SINTEX PRODUCTION





# Production Execution

Define production schedules based on market demand, sales forecasts, and inventory levels. Plan production batches and schedules to optimize resource utilization. Production and operation details monitoring, operation status reporting, machine status reporting, production declaration, genealogy tracking and document and work instruction display and monitoring indicators.





➔ Here we have created different controls in GROUP1 which are going to be used in the future for different purposes.

WhatsApp | Self-Paced Portal - Lab | Ready | 3ds.selfpaced.training/lab/1065835400\_1286391\_88858

Self-Paced Portal | Lobby | Lab | Desktop | Support | Eknath Mohite (1065835400)

DELMIA Apriso Process Builder - [TRN23H1APR3RT] - \*OperationDetails\_Display - SYN.000.000.000

File Edit View Managers Tools Entity Navigation Functions Window Help

Entity Explorer: OperationDetails\_Display - SYN.000.000.000  
BUTTON\_1  
BUTTON\_2

Entity Manager: OperationDetails\_Display - SYN.000.000.000

Groups:

Enabled	Name	Show Title	State	Style	CSS Class
<input checked="" type="checkbox"/>	GROUP1	<input checked="" type="checkbox"/>	Open		

Controls:

Enabled	Code	Type	Data Type	Show Title	Required	Initial Value	Span Over
<input checked="" type="checkbox"/>	WipOrder	Label	Char	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1
<input checked="" type="checkbox"/>	_Space	Label	Char	<input type="checkbox"/>	<input type="checkbox"/>		1
<input checked="" type="checkbox"/>	WipOperationdesc	Label	Char	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1
<input checked="" type="checkbox"/>	Release	Button (Primary)	Char	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1
<input checked="" type="checkbox"/>	TargetQty	Label	Decimal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0	1
<input checked="" type="checkbox"/>	_Space1	Label	Char	<input type="checkbox"/>	<input type="checkbox"/>		1
<input checked="" type="checkbox"/>	CurrentMachine	Label	Char	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1
<input checked="" type="checkbox"/>	Uptime	Button (Primary)	Char	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1
<input checked="" type="checkbox"/>	Product	Label	Char	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1
<input checked="" type="checkbox"/>	_Space2	Label	Char	<input type="checkbox"/>	<input type="checkbox"/>		1
<input checked="" type="checkbox"/>	WIPOperationDisplay	Label	Char	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1
<input checked="" type="checkbox"/>	Hold	Button (Primary)	Char	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1
<input checked="" type="checkbox"/>	AlreadyProducedQty	Label	Decimal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0	1
<input checked="" type="checkbox"/>	_Space3	Label	Char	<input type="checkbox"/>	<input type="checkbox"/>		1
<input checked="" type="checkbox"/>	Status	Label	Char	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1
<input checked="" type="checkbox"/>	Downtime	Button (Primary)	Char	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1
<input checked="" type="checkbox"/>	LotNumber	Label	Char	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1
<input checked="" type="checkbox"/>	_Space4	Label	Char	<input type="checkbox"/>	<input type="checkbox"/>		1
<input checked="" type="checkbox"/>	Operationstatus	Label	Char	<input checked="" type="checkbox"/>	<input type="checkbox"/>		1
<input checked="" type="checkbox"/>	_Space5	Label	Char	<input type="checkbox"/>	<input type="checkbox"/>		1

Properties: GROUP1

General

Name: GROUP1

Title: Code: Translation:

☒ Show Title

Position Order: 1

Column Count: 8

Focus:

State: Open

Style: CSS Classes: Inline Style:

Actions: Forms

Connected to TRN23H1APR3RT as ADMIN | Sign off on release not required | Design Mode is enabled | Editable | Prototype

➔ We added 4 types of buttons RELEASE, HOLD, UPTIME, and DOWNTIME in OperationDetails\_Display view for their different type of functions.

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DELMIAPriso Process Builder - [TRN23H1APR3RT] - \*OperationDetails\_Display - SYN.000.000.000

File Edit View Managers Tools Entity Navigation Functions Window Help

Entity Explorer ▾  
OperationDetails\_Display - SYN.000.000.000  
  RELEASE  
  HOLD  
  UPTIME  
  DOWNTIME

Entity Manager   OrderDetails\_E...N.000.000.000   \*OperationDet...N.000.000.000

OperationDetails\_Display - SYN.000.000.000

Groups

Enabled	Name	Show Title	State	Style	CSS Class
<input checked="" type="checkbox"/>	GROUP1	<input checked="" type="checkbox"/>	Open		

Open View Operation

Properties ▾  
General   Advanced  
Style  
CSS Classes  
Inline Style  
font-size:1.4em;  
margin-left: -62px;

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DELMIAPriso Process Builder - [TRN23H1APR3RT] - EX01\_SCR2\_SYN - SYN.000.000.000

File Edit View Managers Tools Entity Navigation Functions Window Help

Entity Manager   OperationDetail...N.000.000.000   SYN\_SCR\_01 - SYN.000.000.000   EX01\_SCR2\_SY...N.000.000.000

Back to Designer

DELMIAPriso | EX01\_SCR2\_SYN   EX01\_SCR2\_SYN   1:46:12 PM

GROUP1

Wip Order:	Wip Operation desc:	Release	Target Qty: 0	Machine:	Uptime
Product:	WIPOperation#:	Hold	Already Produced 0	Status:	Downtime

Test Mode Panel  
Style context: Portal

Name	Value	Override Value	Type
WORKCENTER		<input type="checkbox"/>	System.
WIPORDERTYPE	-1	<input type="checkbox"/>	System.
WIPORDERNO		<input type="checkbox"/>	System.
WEBADDRESS	TRN23H	<input type="checkbox"/>	System.
VIEWID		<input type="checkbox"/>	System.
TRANSLATIONMO	True	<input type="checkbox"/>	System.
THEME	Default	<input type="checkbox"/>	System.
TASKID	1000012	<input type="checkbox"/>	System.
STEPSEQUENCEN	6	<input type="checkbox"/>	System.
STEPID	1000046	<input type="checkbox"/>	System.
SCREENID	0	<input type="checkbox"/>	System.
REASONCODE		<input type="checkbox"/>	System.
PROCESSREVISIO		<input type="checkbox"/>	System.
PROCESSOPERAT	-1	<input type="checkbox"/>	System.
PROCESSID	-1	<input type="checkbox"/>	System.
PLATFORM	Desktop	<input type="checkbox"/>	System.
OPRSEQUENCEN		<input type="checkbox"/>	System.
OPERATIONREVIS	APR.006.	<input type="checkbox"/>	System.
OPERATIONID	1000018	<input type="checkbox"/>	System.
LANGUAGEID	1033	<input type="checkbox"/>	System.
JOBID	-1	<input type="checkbox"/>	System.
ISPROCESSSTEP	False	<input type="checkbox"/>	System.
FACILITY	IC1	<input type="checkbox"/>	System.
EQUIPMENTID	0	<input type="checkbox"/>	System.
EMPLOYEEENO	ADMIN	<input type="checkbox"/>	System.
EMPLOYEEID	1	<input type="checkbox"/>	System.



➔ Added function to Operation\_Release\_Transaction operation



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DELMIA Apriso Process Builder - [TRN23H1APR3RT] - Operation\_Release\_Transaction\_SYN - SYN.000.000.000

File Edit View Managers Tools Entity Navigation Functions Window Help

Entity Explorer

Operation\_Release\_Transaction\_S

1 - Release\_Transaction

OperationCurrentHold\_Get

WipOrder (Char)

WipOrderType (Char)

WipOperation (Char)

Count (Integer)

ReasonCodeList (Char)

ErrorCode (Char)

IsError (Boolean)

ReleaseWipOperation

WipOrderNo (Char)

WipOrderType (Integer)

OprSequenceNo (Char)

ReasonCodeRequired (

ReleaseReasonCode (

HoldReasonCode (Cha

Entity Manager

OperationDetail...N.000.000.000

Operation\_Rele...N.000.000.000

Machine\_Start...N.000.000.000

Operation\_Release\_Transaction\_SYN - SYN.000.000.000

Release\_Transaction

OperationCurrentHold\_GetData

WipOrder

WipOrderT...

WipOperati...

WipOrder

Count

ReasonCodeList

ErrorCode

IsError

ReleaseWipOperation

WipOrder

WipOrderT...

WipOperati...

False

WipOrderNo

WipOrderType

OprSequenceNo

ReasonCodeRe...

ReleaseReason...

HoldReasonCode

Function Navigation

Layout Editor

Validation Messages

0 Errors

0 Warnings

0 Messages

Show messages: All

Entity Type

Name

Description

Functions

3DEXPERIENCE Message

Apriso Message

Business Component

Business Control

DAL Query

Determination

Extensible Access Control

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Ekmath Mohite (1065835400)

DELMIA Apriso Process Builder - [TRN23H1APR3RT] - SYN\_SCR\_01 - SYN.000.000.000

File Edit View Managers Tools Entity Navigation Functions Window Help

Entity Manager

OperationDetail...N.000.000.000

Operation\_Rele...N.000.000.000

Machine\_Start...N.000.000.000

SYN\_SCR\_01 - SYN.000.000.000

DELMIA Apriso | Task List

SYN\_SCR\_01

8:33:09 AM

Assign/ Unassign machine

Execute

ProductNo	Workcenter	Wip Order #	Wip Operation Desc	Wip Operation #	Wip Operation	Lot #	Date Schedule	Status	Machine
Not filtered	Not filtered					Not filtered			
Sintex_FP	Furnace_WC	PRD001	Mixing	0010	0010@100000153	SintexLot001		Started	SYN_M

Test Mode Panel

Style context: Portal

Search:

by name by value

Debug Tree

PortalExecute - APR.006.002 - 00:00:00.5018762

Initialize - 00:00:00.0571252

InitializeScreen - 00:00:00.0030035

BeforeDisplay - 00:00:00.0059361

DisplayScreen - 00:00:00.3570194



## ➔ Adding function to step 1 GetMachine\_Transaction of operation Machine\_Start\_Transaction

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DELMIA Apriso Process Builder - [TRN23H1APR3RT] - \*Machine\_Start\_Transaction\_SY

File Edit View Managers Tools Entity Navigation Functions Window Help

Entity Explorer ▾ ▹ x

- Machine\_Start\_Transaction\_SY
- 1 - GetMachine\_Transaction

Entity Manager x OperationDetail...N.000.000.000 x Machine\_Start\_Transaction\_SY - SYN.000.000.000

Machine\_Start\_Transaction\_SY - SYN.000.000.000

1 - GetMachine\_Transaction

Equipment\_GetData

Equipment (Char) Count

ResourceName (Char) ResourceType (Char) ProductionLine (Char) ErrorCode (Char) IsError (Boolean)

Equipment\_GetAssignmentStatus

ResourceName (Char) Count (Char) ResourceType (Char) Code (Char) ShowMessageCo... (Boolean) ErrorCode (Char) IsError (Boolean)

ErrorMessage

Code (Char) ShowMessage (Boolean) ShowAsModal (Boolean)

False

ExternalInputs\_Get

WipOrder (Char) WipOrderType (Char) WipOperation (Char) ActivityTime (Char)

WipOrderType (Char) WipOperation (Char) ActivityTime (Char)

CurrentLoc... (Char) ActivityTime (Char)

Function Navigation Layout Editor

Validation Messages

0 Errors 0 Warnings 0 Messages Show messages: All Find:

Entity Type Name Description

Properties ▾ ▹ x

General

Name WipOrderType

Description

Data Type Char

Char Scalar Integer Decimal Boolean DateTime Complex

Default Value

Routing Dispositions

User External Session Machine Remove

Type Comment

Session/Variable

Session Variable Name WipOrderType



## ➔ Adding function to step 2 SetMachine\_Transaction of operation Machine\_Start\_Transaction

Self-Paced Portal Lobby Lab Desktop Support Eknath Mohite (1065835400)

DELMIA Apriso Process Builder - [TRN23H1APR3RT] - \*Machine\_Start\_Transaction\_SYN - SYN.000.000.000

File Edit View Managers Tools Entity Navigation Functions Window Help

Entity Explorer: Machine\_Start\_Transaction\_SY  
1 - GetMachine\_Transaction  
2 - SetMachine\_Transaction  
EquipmentDetailsTransaction

Entity Manager: Machine\_Start\_Transaction\_SYN - SYN.000.000.000 ▶ SetMachine\_Transaction

Properties: General Work Instructions Advanced  
Name: New Step 1  
Description:  
Type: Operator  
Routing Output:  
☐ Return Step  
Function Dependencies:  
Show Execution Order  
Function: PreviousFunction

Function Navigation Layout Editor

Validation Messages: 0 Errors 2 Warnings 0 Messages Show messages: All Find:

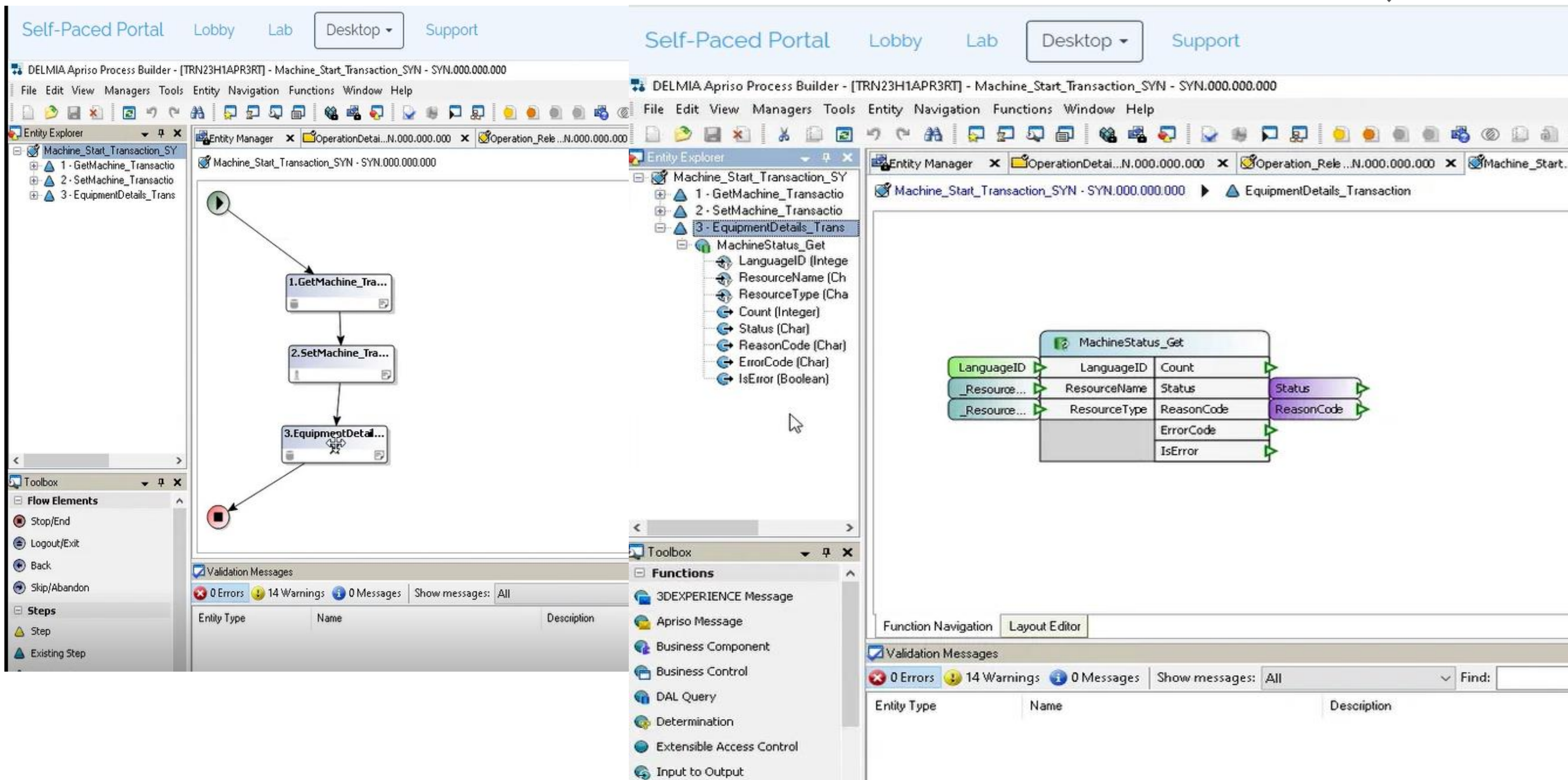
Entity Type Name Description

CreateEvent_v2		
_Resource...	ResourceName	CreatedResour...
_Resource...	ResourceType	
_Productio...	ProductionLine	
EmployeeID	EmployeeID	
0	Speed	
0	SpeedPercentage	
	SpeedUom	
SYN_EQ_U...	ReasonCode	
	Comment	
_ActivityTi...	ActivityTime	
	Occupation	
False	ReopenChildren	

StartOrder_v2		
_WipOrder	WipOrderNo	LaborID
WipOrderT...	WipOrderType	
_WipOpera...	OprSequenceNo	
_Resource...	ResourceName	
_Resource...	ResourceType	
_Productio...	ProductionLine	
	WorkCenter	
EmployeeID	EmployeeID	
0	ProductID	
	LotNo	
_ActivityTi...	ActivityTime	
	OccupationCode	
SYN_EQ_U...	ReasonCode	
	LaborCode	



## ➔ Adding function to step 3 EquipmentDetails\_Transaction of operation Machine\_Start\_Transaction



The screenshot displays the DELMIA Apriso Process Builder interface for the 'Machine\_Start\_Transaction\_SYN' process. The main workspace shows a flowchart with three steps: 1. GetMachine\_Transaction, 2. SetMachine\_Transaction, and 3. EquipmentDetails\_Transaction. The 'EquipmentDetails\_Transaction' step is currently selected, and its details are shown in the right-hand pane.

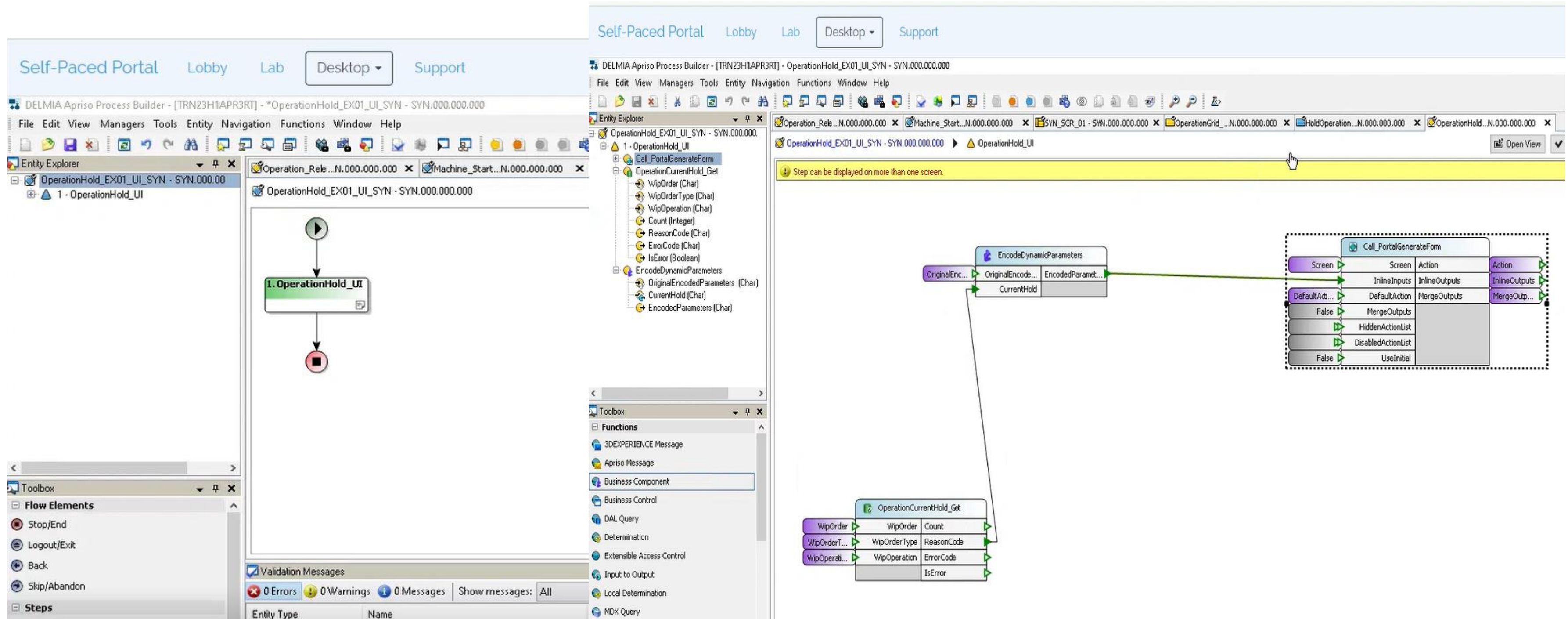
The 'EquipmentDetails\_Transaction' details pane shows the 'MachineStatus\_Get' function. The function's inputs and outputs are listed in a table:

Input/Output	Parameter Name	Parameter Type
LanguageID	LanguageID	Integer
_Resource...	ResourceName	Character
_Resource...	ResourceType	Character
	Count	Integer
	Status	Character
	ReasonCode	Character
	ErrorCode	Character
	IsError	Boolean

The 'MachineStatus\_Get' function is also shown in the 'Entity Explorer' on the left, which lists its inputs and outputs. The 'Validation Messages' pane at the bottom indicates 0 Errors, 14 Warnings, and 0 Messages.

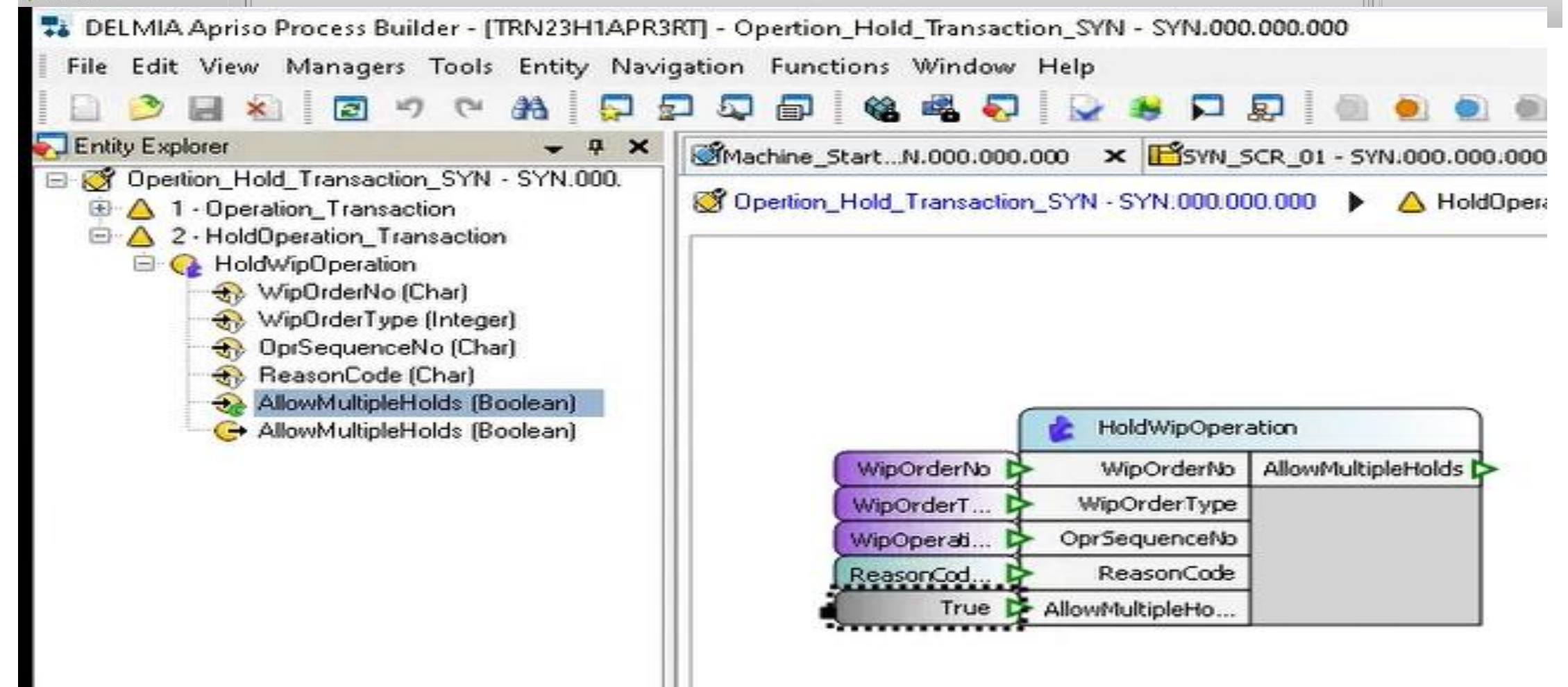
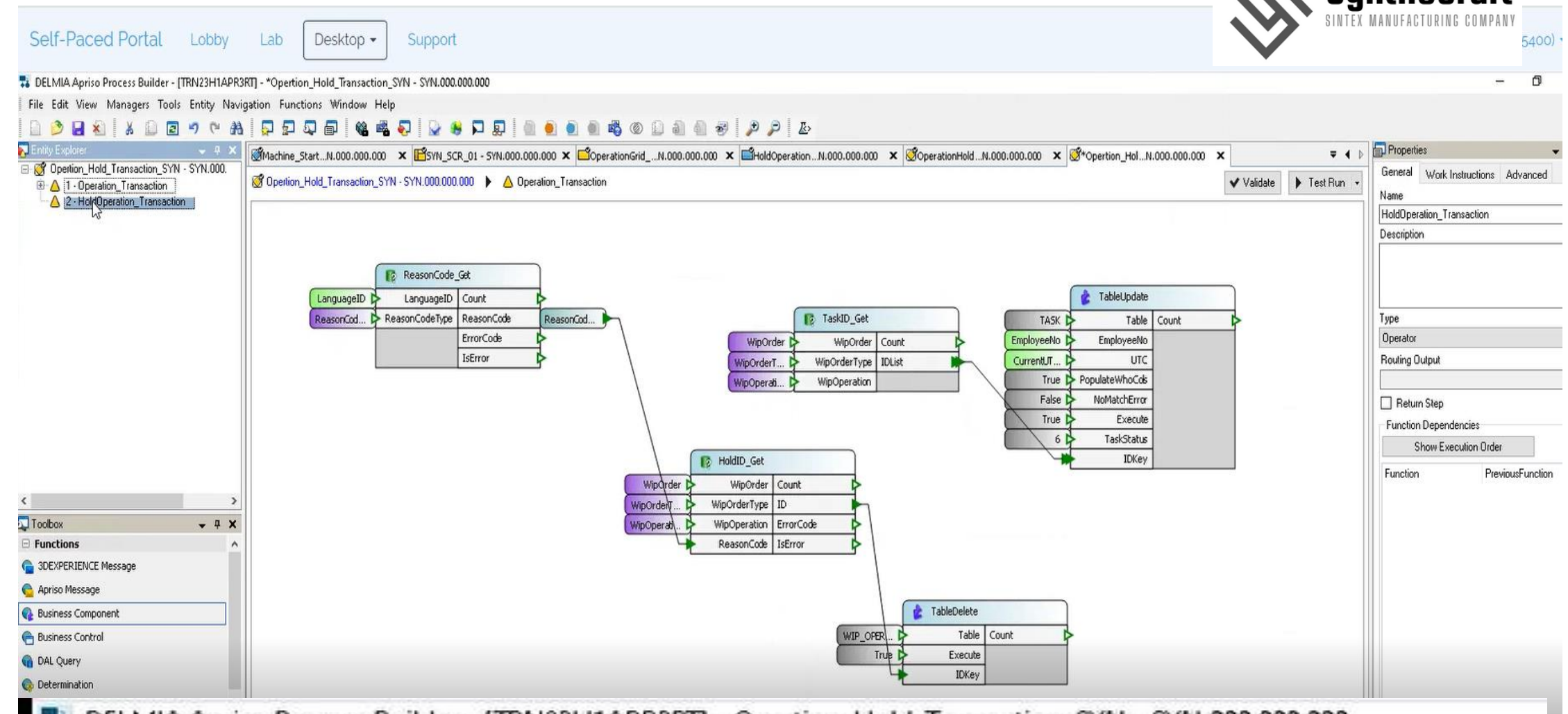
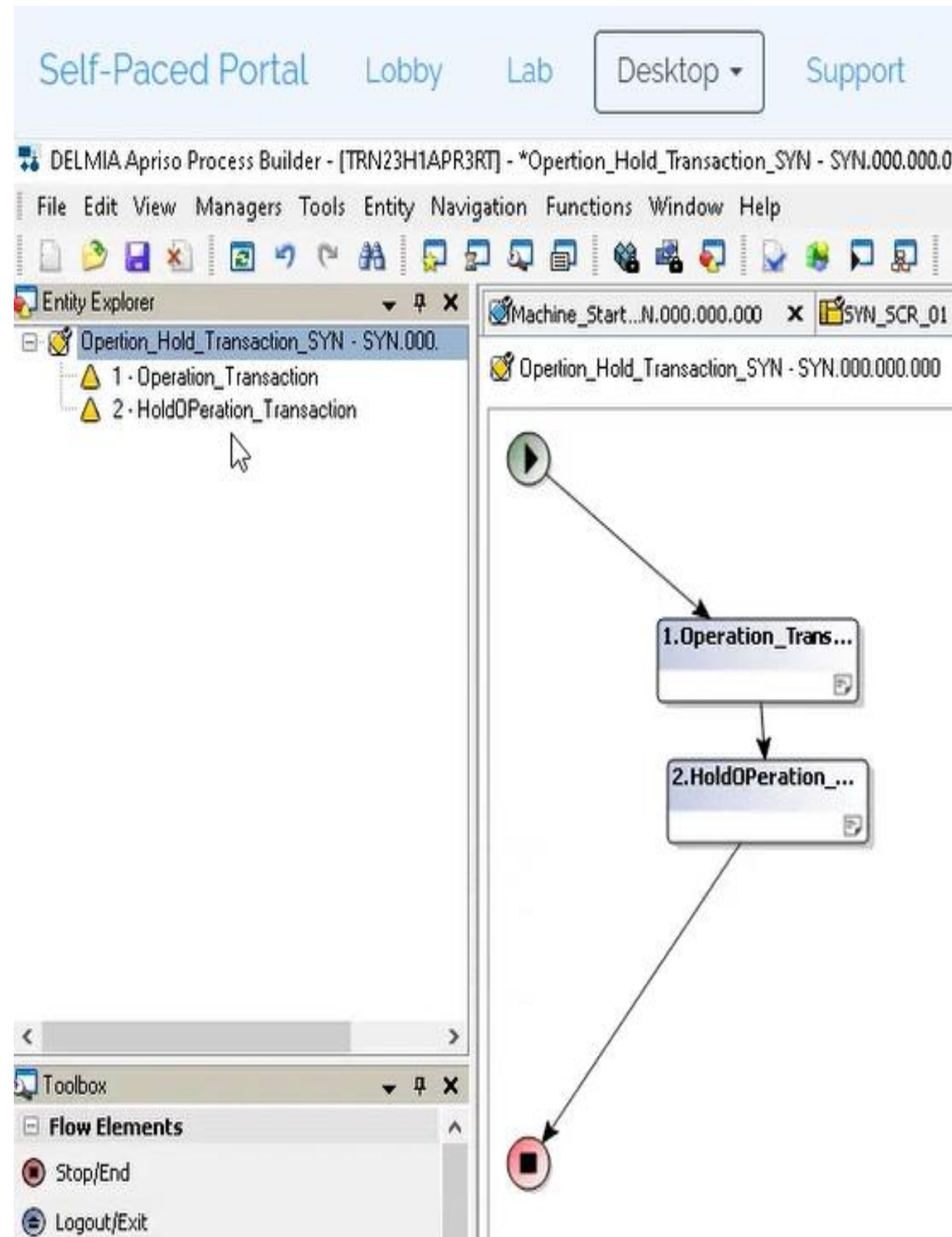


- ➔ Open OperationDetails\_Display view, in HOLD action properties go to Copy and Link of Open Pop-up View create a new entity of PortalForm i.e HoldOperation\_PopUp.
- ➔ Create a new entity of GenericPortalForm in HoldOperation\_PopUp view of name OperationHold\_EX01\_UI\_SYN.
- ➔ Add a step i.e OperationHold\_UI\_SYN in OperationHold\_EX01\_UI.





# ➔ Adding 2 steps in Operation\_Hold\_Transaction i.e Operation\_Transaction and HoldOperation\_Transaction.





➔ Created a System Parameter SYN\_DS\_ReasonCodeHoldList.

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DELMIA Apriso Process Builder - [TRN23H1APR3RT] - System Parameters and Lists

File Edit View Managers Tools Entity Navigation Functions Window Help

OperationDetail...N.000.000.000   Operation\_Rela...N.000.000.000   Machine\_Start...N.000.000.000   SYN\_SCR\_01 - SYN.000.000.000   OperationGrid\_...N.000.000.000   \*HoldOperatio...N.000.000.000   OperationHold...N.000.000.000   Opertion\_Hold...N.000.000.000   System Parameters and Lists

System Parameters and Lists   System Parameter Properties

General   Usages   System

Name: SYN\_DS\_ReasonCodeHoldList   Category: [dropdown]

Short Description:   Medium Description:   Extended Description: [icon]

Data Type: Char   Localizable: ☐   System Parameter Type: Dynamic SQL

☐ Runtime values are specific to this Apriso instance

☐ Include key in description

System Parameter options

Text translation column\*: None   Cache results: ☐

Query:\*\* (SELECT [Key], [Description] FROM [Table])

MS SQL   Oracle

Test query on: FlexNet   Use query from the other database type: ☐

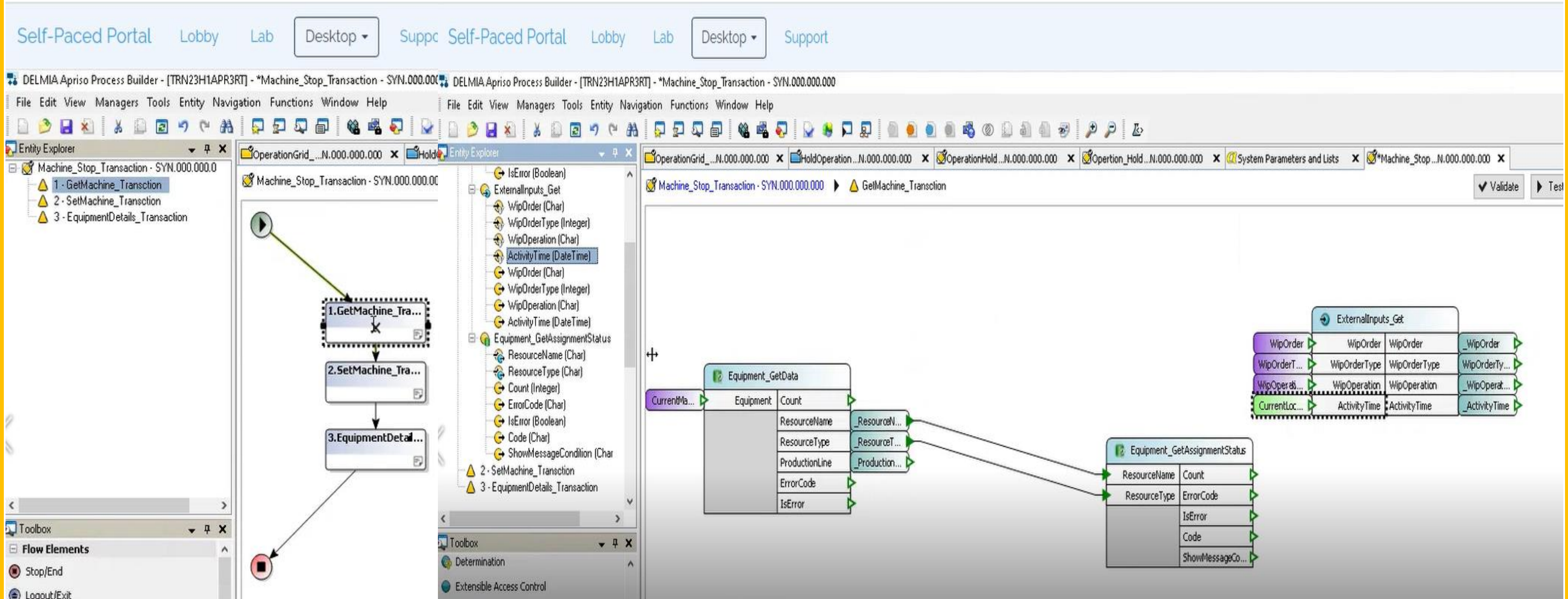
Open...   Save As...   Verify   Execute   Break

```
1 SELECT TT.Medium AS [key],
2       TT.Medium AS [description]
3 FROM   REASON_CODE RC
4       LEFT JOIN TEXT_TRANSLATION TT
5           ON RC.TextID = TT.TextID
6          AND TT.LanguageID = @LanguageID
7 WHERE  RC.ReasonType = 7
8       AND RC.Facility = 'C1P1'
```

key	description
Operation Hold:L	Operation Hold:L
Operation Hold:	Operation Hold:



- ➔ Create New operation Machine\_Stop\_Transaction which consists of 3 steps:  
GetMachine\_Transaction, SetMachine\_Transaction and EquipmentDetails\_Transaction.
- ➔ Adding function to step GetMachine\_Transaction of Machine\_Stop\_Transaction operation.





## ➔ Adding function to step SetMachine\_Transaction and EquipmentDetails\_Transaction of Machine\_Stop\_Transaction operation.

Self-Paced Portal Lobby Lab Desktop Support

DELMIA Apriso Process Builder - [TRN23H1APR3RT] - \*Machine\_Stop\_Transaction - SYN.000.000.000

File Edit View Managers Tools Entity Navigation Functions Window Help

Entity Explorer

- ReopenChildren (Boolean)
- CreatedResourceLaborID (List)
- ErrorMessage
  - Code (Char)
  - ShowMessage (Boolean)
  - ShowAsModal (Boolean)
- 3 - EquipmentDetails\_Transaction

Machine\_Stop\_Transaction - SYN.000.000.000 ▶ SetMachine\_Transaction

ReasonCode\_Get

LanguageID	LanguageID	Count
NewDownt...	reasoncode	ReasonCode
	ErrorCode	
	IsError	

CreateEvent\_v2

Resource...	ResourceName	CreatedResourc...
_Resource...	ResourceType	
_Productio...	ProductionLine	
EmployeeID	EmployeeID	
0	Speed	
0	SpeedPercentage	
	SpeedUom	
	ReasonCode	
	Comment	
_ActivityTi...	ActivityTime	
	Occupation	
True	ReopenChildren	

ErrorMessage

Code
ShowMessage
ShowAsModal

False

Function Navigation Layout Editor

Validation Messages

0 Errors 1 Warnings 0 Messages Show messages: All Find:

Entity Type Name Description

Toolbox

- Functions
- 3DEXPERIENCE Message
- Apriso Message
- Business Component
- Business Control
- DAL Query

Self-Paced Portal Lobby Lab Desktop Support

DELMIA Apriso Process Builder - [TRN23H1APR3RT] - Machine\_Stop\_Transaction - SYN.000.000.000

File Edit View Managers Tools Entity Navigation Functions Window Help

Entity Explorer

- ReopenChildren (Boolean)
- CreatedResourceLaborID (List)
- ErrorMessage
  - Code (Char)
  - ShowMessage (Boolean)
  - ShowAsModal (Boolean)
- 3 - EquipmentDetails\_Transaction
- MachineStatus\_Get
  - LanguageID (Integer)
  - ResourceName (Char)
  - ResourceType (Char)
  - Count (Integer)
  - Status (Char)
  - ReasonCode (Char)
  - ErrorCode (Char)
  - IsError (Boolean)

MachineStatus\_Get

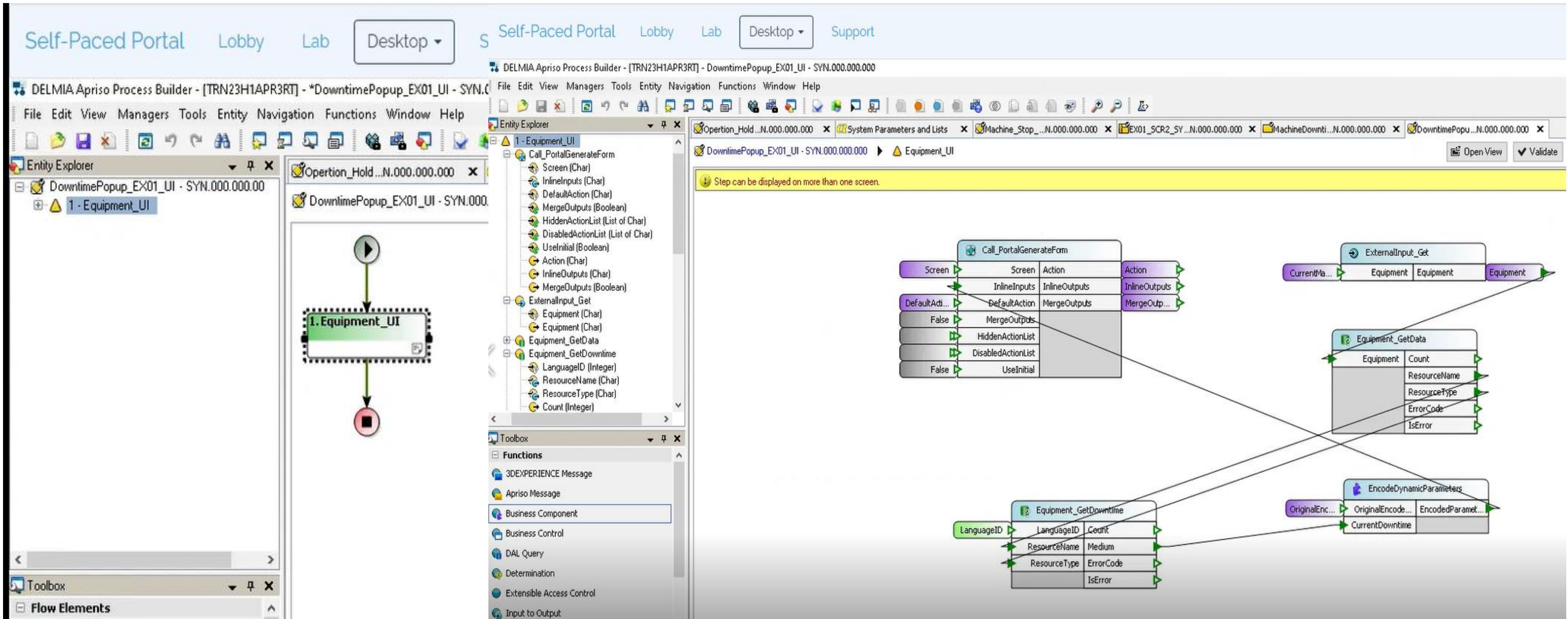
LanguageID	LanguageID	Count	Status	ReasonCode
_Resource...	ResourceName	Status		
_Resource...	ResourceType	ReasonCode		
	ErrorCode			
	IsError			

Toolbox

- Functions



- ➔ Open OperationDetails\_Display view, in DOWNTIME action properties go to Copy and Link of **Open Pop-up View** create a new entity of PortalForm i.e MachineDowntime\_PopUp.
- ➔ Create a new entity of GenericPortalForm in MachineDowntime\_PopUp view of name DowntimePopup\_EX01\_UI\_SYN.
- ➔ Add a step i.e Equipment\_UI in DowntimePopup\_EX01\_UI\_SYN



- ➔ Created a System Parameter SYN\_DS\_ReasonCodeDowntimeList.
- ➔ Linked it with NewDowntime control.

Self-Paced Portal Lobby Lab Desktop Support Eknath Mohite (1065835400)

DELMIA Apriso Process Builder - [TRN23H1APR3RT] - System Parameters and Lists

File Edit View Managers Tools Entity Navigation Functions Window Help

OperationGrid\_...N.000.000.000 x HoldOperation...N.000.000.000 x OperationHold...N.000.000.000 x Opertion\_Hold...N.000.000.000 x System Parameters and Lists x Machine\_Stop\_...N.000.000.000 x EX01\_SCR2\_SY...N.000.000.000 x \*MachineDown...N.000.000.000 x DowntimePopu...N.000.000.000 x

System Parameters and Lists +

System Parameters and Lists System Parameter Properties Help Save Discard Close

General Usages System

Name: SYN\_DS\_ReasonCodeDowntimeL Category: [Dropdown]

Short Description: [Text Box] Medium Description: [Text Box] Extended Description: [Text Box]

Data Type: Char Localizable: [ ] System Parameter Type: Dynamic SQL

☐ Runtime values are specific to this Apriso instance

☐ Include key in description

System Parameter options

Text translation column\*: None [ ] Cache results

Query: (SELECT [Key], [Description] FROM [Table])

MS SQL Oracle

Test query on: FlexNet [ ] Use query from the other database type

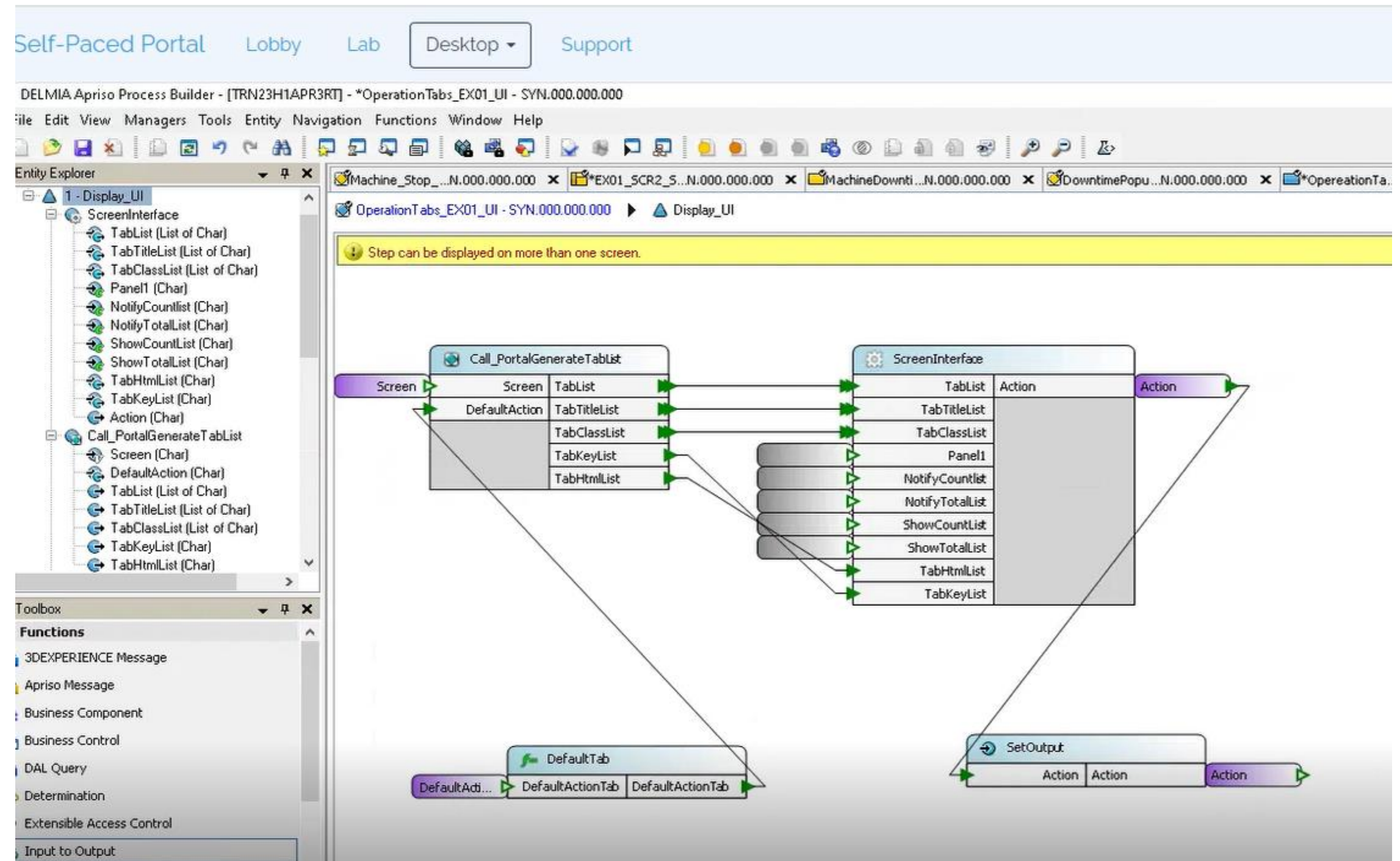
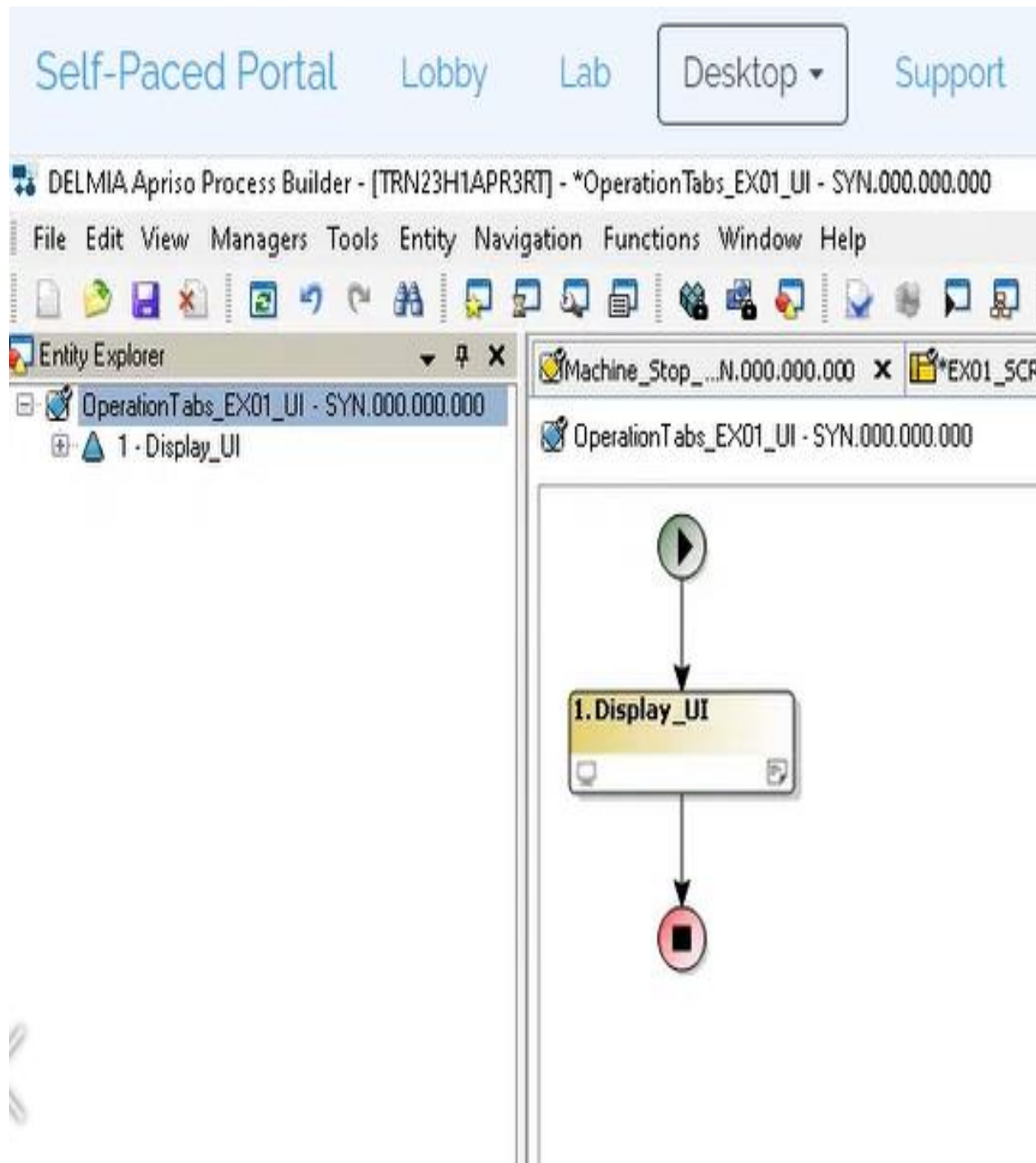
Open... Save As... Verify Execute Break

```
1 SELECT TT.Medium AS [key],
2       TT.Medium AS [description]
3 FROM   REASON_CODE RC
4        LEFT JOIN TEXT_TRANSLATION TT
5              ON RC.TextID = TT.TextID
6              AND TT.LanguageID = @LanguageID
7 WHERE  RC.ReasonType IN( 3, 24 )
8        AND RC.Facility = 'C1P1'
```

key	description
Machine Breakdo	Machine Breakdo
Machine Down(N	Machine Down(N



- ➔ In EX01\_SCR2\_SYN, click **Copy And Link View TAB** panel, select **PortalTab** and create a new entity **OperationTabs\_Display**.
- ➔ Open **OperationTabs\_Display** view, go to **Copy and Link of View Operation** create a new entity of **GenericPortalTab** i.e **OperationTabs\_EX01\_UI**.
- ➔ Add a step i.e **Display\_UI** in **OperationTabs\_EX01\_UI** and add functions to it.





- ➔ In EX01\_SCR2\_SYN, click Copy And Link View of Quantity panel, select PortalForm and create a new entity DeclareQuantity\_Display.
- ➔ Open DeclareQuantity\_Display view, go to Copy and Link of View Operation create a new entity of GenericPortalForm i.e Operation\_SaveScrapButton\_EX01\_UI.
- ➔ Add a step i.e Equipment\_Validation in Operation\_SaveScrapButton\_EX01\_UI.

