

**Operations Guide | PUBLIC** Document Version: 2402 – 2024-02-24

# **Operations Guide for SAP Digital Manufacturing**



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# **1** Prerequisites

The following prerequisites are required to perform operations.

# SAP Business Technology Platform Cockpit

- To create subaccounts and manage members in an SAP Business Technology Platform global account, you must be a member of the global account.
- To assign entitlements and services to subaccounts, you must be a global account administrator.
- To subscribe to applications and perform other administrative tasks like creating destinations in subaccounts, you must be a member of the global account.
- To manage trust configuration and configure authorization using role collections, you must be a security administrator in the subaccount.

# **SAP Cloud Identity Services - Identity Authentication Tenant**

If you use SAP Cloud Identity Services - Identity Authentication to manage users, you must be a tenant administrator and assigned the appropriate roles.

After being added to the tenant as an administrator, you receive an email with an account activation link. To perform tenant administrative tasks, you must first activate the user account.

# **Related Information**

Administrator Authorizations in SAP Cloud Identity Services - Identity Authentication

# **2** Supported Data Centers

The following data centers support SAP Digital Manufacturing:

Region Name	laaS Provider	Region
Europe (Netherlands)	Microsoft Azure	eu20
US West (WA)	Microsoft Azure	us20

## **Related Information**

SAP Business Technology Platform Regions and Service Portfolio Cloud Foundry Regions and API Endpoints

# 3 Data Storage

Find out about data storage for SAP Digital Manufacturing.

For the latest information on data storage, see 2662178

# **4** Browser and Platform Support Matrix

Find out which browsers and platforms you can use to run SAP Digital Manufacturing.

For the latest information on the browsers and platforms supported by SAP Digital Manufacturing, see 2722235

# 5 Language Support

Find out which languages the user interface of SAP Digital Manufacturing supports.

For the latest information on the languages supported by SAP Digital Manufacturing, see SAP note 2722461.

# 6 **Onboarding and User Management**

The onboarding process starts after your organization purchases SAP Digital Manufacturing. During the process, the contact person of your organization receives a series of emails from SAP, with instructions for next steps and additional information. If your organization does not already have an SAP Business Technology Platform global account or an SAP Cloud Identity Services - Identity Authentication tenant, the contact person is automatically assigned as the first administrator for the global account or tenant.

Onboarding Process						
Contact Person	BTP <sup>1</sup> and/or IdP <sup>2</sup> Administrator	Administrator	() User			
Receive welcome email from SAP Digital Manufacturing Receive provisioning complete email from SAP Digital Manufacturing	Subscribe to SAP Digital Manufacturing Configure authorization	Onboard organization	Activate user account			
			1. SAP BTP subaccount 2. Identity provider			

- Welcome Email from SAP Digital Manufacturing [page 10]
- Provisioning Complete Notification from SAP Digital Manufacturing [page 10]
- Subscribe to SAP Digital Manufacturing [page 11]
- Configure Authorization by Creating Role Collections [page 13]
- Manage Users and Authorization [page 116]
- Onboard Your Organization [page 123]
- Activate User Account [page 125]

# 6.1 Emails from SAP

The contact person for an organization is responsible for the communication between the organization and SAP. The communication includes a series of emails from SAP.

During the provisioning process for SAP Digital Manufacturing, the contact person receives several emails.

When using the application, the contact person receives further emails such as upgrade and downtime notifications.

## Welcome Email from SAP Business Technology Platform

If an organization doesn't already have an SAP Business Technology Platform account, a new global account is provisioned.

The contact person receives a welcome email with access information to an SAP Business Technology Platform account. An S-user (SAP user) is also created for the contact person and added as the first member of the account.

For information on adding additional contact persons to your account, see Initial Access to Your SAP BTP Cockpit

# Account Activation Email from SAP Cloud Identity Services - Identity Authentication

If an organization doesn't already have an SAP Cloud Identity Services - Identity Authentication tenant, a new tenant is also provisioned.

The contact person receives an account activation email and is redirected to the administration console when activating the user account.

### Welcome Email from SAP Digital Manufacturing

After an organization purchases SAP Digital Manufacturing, the contact person receives a welcome email with the order details.

# **Provisioning Complete Notification from SAP Digital Manufacturing**

When the provisioning process for SAP Digital Manufacturing is complete, the contact person receives a notification. This email includes information on getting started with SAP Digital Manufacturing and instructions for further actions.

#### (i) Note

The provisioning process can take up to 24 hours.

# 6.2 Subscribe to SAP Digital Manufacturing

Subscribe to SAP Digital Manufacturing to trigger the provisioning process.

# Prerequisites

- Your organization has purchased SAP Digital Manufacturing.
- The entitlement appropriate to the license has been allocated to your SAP Business Technology Platform global account.
- To add entitlements directly in a subaccount, you must be a member of the subaccount and a global account administrator. For more information, see Configure Entitlements and Quotas for Subaccounts.

# Context

Depending on the role of your organization (customer or partner), the license purchased, and the purpose of the subscription, different entitlements (SaaS applications) for SAP Digital Manufacturing are available.

For each customer, 2 SaaS applications for SAP Digital Manufacturing are available for subscription: one for production and one for testing. As a partner, you receive one application.

#### ▲ Caution

You must subscribe to the production and test applications in different subaccounts.

As the production and test applications use the same services, when you subscribe to an application, you may notice that the other application is automatically subscribed. However, the subscription doesn't trigger the provisioning process for the other application. Subscribe to the other application separately in another subaccount.

The video shows how you subscribe to SAP Digital Manufacturing on the SAP Business Technology Platform.

### Procedure

- 1. Log into your global account on the SAP Business Technology Platform using the URL provided in your provisioning mail. For more information, see Emails from SAP [page 9].
- 2. Create a subaccount in the multi-cloud environment. Optionally, you can use an existing subaccount created in a region that supports SAP Digital Manufacturing. For more information, see Supported Data Centers [page 5].

If you create a new subaccount, fill in the following information:

Field	Description	
Display Name	Define a meaningful name for the subaccount.	
Environment	Multi-cloud	
Provider	Refer to Supported Data Centers [page 5] to select the infrastructure provider.	
Region	Refer to Supported Data Centers [page 5] to select the region for the data center.	
Subdomain	The system automatically creates a subdomain based of the subaccount you select. You can change the name of the subdomain. If you change the name, ensure that the name you choose contains only lowercase letters and di its.	
	The subdomain is part of the application URL for SAP Digital Manufacturing. Therefore, ensure that the subdo- main is identifiable and meaningful for your users.	

- 3. In the subaccount Overview page, choose Enable Cloud Foundry and enter a name for your Org.
- 4. Create a space.
  - a. In the subaccount you created, choose Create Space.
  - b. Enter a name for your space and choose *Create*.
- 5. Configure the entitlements of the subaccount.
  - a. Choose *Entitlements* from the left hand-side navigation to see the entitlements available for your subaccount.
  - b. Choose Configure Entitlements.
  - c. Choose *Add Service Plans*. From the dialog, you can select the services and the plans from each service that you would like to add to the subaccount.

You can also edit the quota assigned to service plans during this step.

- d. Select the SAP Digital Manufacturing for execution application and the relevant plan.
- e. When you're done, choose Save to save and exit edit mode.
- 6. Subscribe to SAP Digital Manufacturing. Subscribe to the test tenant before you subscribe to the production tenant. Test tenant availability depends on your license:

License	Available Test Tenant
Test and Demo	SAP Digital Manufacturing for execution, Test; Plan: part- nertandd
SAP Digital Manufacturing for execution	SAP Digital Manufacturing for execution, Test; Plan: test
SAP Digital Manufacturing for insights	SAP Digital Manufacturing for insights, Test; Plan: test

- a. From the side bar menu, choose Service Marketplace.
- b. Search for the **application** SAP Digital Manufacturing.
- c. Choose the tile for the appropriate SAP Digital Manufacturing entitlement.
- d. Choose Create.
- e. In the dialog box that appears, select the relevant plan and choose *Create*.

The subscription is submitted.

f. To check the status of your subscription, go to *Instances and Subscriptions*.

The *Go to Application* link becomes available. Choose the link to launch the application and obtain its URL.

#### ▲ Caution

Once the provisioning process is completed, you'll receive a notification from SAP. At that point, you can share the application URL with the intended users of SAP Digital Manufacturing in your organization. Until then, the application will remain inaccessible.

- g. If your subscription fails, choose View Details and follow the steps described there.
- 7. If you've another entitlement for a production tenant for SAP Digital Manufacturing, create a new subaccount for production use and repeat steps 3 to 6.

License	Available Production Tenant	
SAP Digital Manufacturing for execution	SAP Digital Manufacturing for execution; Plan: production	
SAP Digital Manufacturing for insights	SAP Digital Manufacturing for insights; Plan: production	

## Results

Once you trigger the provisioning process, you'll receive a notification when it's complete. Provisioning can take up to 24 hours to complete.

# **Related Information**

Subscribe to Multitenant Business Applications Using the Cockpit

# 6.3 Configure Authorization by Creating Role Collections

As a security administrator for an SAP Business Technology Platform subaccount, you can configure authorization for applications and services by creating role collections. A role collection contains one or more roles from the same or different applications or services. Each role is created based on a role template that defines the permissions for an application or service.

### Context

SAP Digital Manufacturing provides two types of role templates you can use to create role collections. Personabased role templates authorize access to apps based on a persona such as the Production\_Engineer or the Production\_Operator. Object-based role templates authorize access to apps required to manage or view an object, such as a nonconformance or a set point

### Procedure

- 1. Go to your subaccount.
  - a. Log on to the SAP BTP cockpit and select a region.
  - b. Select a global account.
  - c. Select a subaccount.
- 2. From the side bar menu, choose Security Role Collections .
- 3. To create a new role collection, choose Create New Role Collection, enter a name, and then choose Create.
- 4. To add roles to the role collection, choose the name of the role collection, and then *Edit*.
- 5. Choose Add Role.
- 6. In the *Select: Role* window, select a role, a role template, and the application identifier for SAP Digital Manufacturing and then choose *Add*.

Role templates and roles have a 1:1 mapping.

The application identifier for each application or service follows a certain pattern. The table contains an overview of the applications and services that are relevant to SAP Digital Manufacturing:

Application / Service	Application Identifier Pat- tern	Example	Remarks
SAP Digital Manufacturing	<license>-dmc-sap- <landscape><randomstr ing&gt;</randomstr </landscape></license>	execution-dmc-sap! t7760	
SAP Business Network Asset Collaboration	ain_broker_ <landscape &gt;<randomstring></randomstring></landscape 	ac_broker_live!b622	
SAP Digital Manufacturing Services	dmc-services- <landscape><randomstr ing&gt;</randomstr </landscape>	dmc-services!b3715	Relevant for integration with Production Connector / SAP Plant Connectivity only. For more information, see Integrate with Production Connector for SAP Digital Manufacturing.
Audit Log Manager	auditlog- management <randomstri ng&gt;</randomstri 	auditlog-management! b6316	
Audit Log Viewer	auditlog- viewer <randomstring></randomstring>	auditlog-viewer!t6316	
Personal Data Manager	personal-data- manager <randomstring></randomstring>	personal-data- manager!b6007	
Retention Manager	retention- manager <randomstring></randomstring>	retention-manager- service!b1824	

Application / Service	Application Identifier Pat- tern	Example	Remarks
SAP BTP Portal	portal-cf- service <randomstring></randomstring>	portal-cf-service! b254	
UI Theme Designer	sap- theming <randomstring></randomstring>	sap-theming!b241	

## **Next Steps**

There are two ways to manage authorizations. If you use a trusted identity provider, you can map role collections to user groups. Alternatively, you can assign role collections manually to users.

- If you use a trusted identity provider, map role collections to user groups in the identity provider. For more information, see Configure Role Collection Mappings [page 122].
- Assign role collections directly to users. For more information, see Assign Users to Role Collections.

# 6.3.1 Role Templates (Persona-Based)

Find out about available persona-based role templates and the permissions each role template has.

### **Overview**

The table contains an overview of all persona-based role templates that are available for SAP Digital Manufacturing.

Role Template	Description
Global_Regional_Manager	A user who is in the management team or board taking tacti- cal decisions to optimize the manufacturing performance. A user who is accountable for manufacturing and production functions across multiple plants.
Plant_Manager	A user who is accountable for manufacturing and production functions of a plant and needs complete visibility into the plant's operations.
Manufacturing_Admin	A user who manages plants and integration configuration.

Role Template	Description		
Production_Supervisor	A user who ensures that the production runs according to the production plan, tracks the production progress, man- ages breakdowns and other exceptional situations.		
	The user is responsible for allocating resources such as la- bor to the right place and at the right time, keeping all ma- chines up and running, and ensuring all material at work.		
Production_Operator	A user who executes work in process transactions and per- forms data collection and nonconformance logging.		
Production_Engineer	A user who defines and manages product and process con- figurations within a plant.		
Automation_Engineer	A user who is responsible for manufacturing automation, for example, defining and maintaining the production processes on the operational level.		
PQM_Analytical_User	A user who has all the authorizations of a PQM_Basic_User. In addition, the user can create new analytical data sets and analyze quality defects to evaluate the influence of 4Ms of manufacturing. The persona would be manufacturing engi- neer, quality engineer, process engineer, and so on.		
PQM_Basic_User	A user who receives predictive quality alerts and can view the predictive evaluation results for a specific combination of plant and equipment. The persona would be a production operator or quality inspector.		
PQM_Model_Manager	A user who has all the authorizations of PQM_Basic_UserPQM_Analytical_User. In addition, the user can create and change Al/ML scenarios, train models, subscribe alerts and review the results after the model is trained. The persona would be a manufacturing engineer or quality engineer.		
Manufacturing_Extension_Provider	A user who manages extensions (registration, unregistra- tion, and so on) and event subscriptions		
Data_Privacy_Auditor	A user who has access to blocked data.		
Edge_Production_Operator	A production operator who (also) works on the shop floor using the edge solution.		
Edge_Production_Supervisor	A production supervisor who (also) works on the shop floor using the edge solution.		
Edge_Admin	A user who manages edge devices and installation, and ad- ministrates edge settings.		

## (i) Note

You can also use the role templates Manufacturing\_Admin\_Limited and Production\_Engineer\_Limited to define roles. These role templates provide limited authorizations for some apps. For more information, see SAP note 3234565<sup>(h)</sup>.

# **Role Templates, Apps, and Permission**

The table describes the permissions each role template has on the SAP Digital Manufacturing apps. Use this table as a basis for configuring role collections.

#### SAP Business Network Asset Collaboration and Asset Central Foundation

#### ▲ Caution

The information on the reuse of features provided by SAP Business Network Asset Collaboration and Asset Central Foundation only applies to tenants hosted on Amazon Web Services.

The role templates for SAP Business Network Asset Collaboration and Asset Central Foundation are also included in this table. SAP Digital Manufacturing reuses some features provided by SAP Business Network Asset Collaboration and Asset Central Foundation, you need to configure these role templates along with the SAP Digital Manufacturing role templates.

- AIN\_ORG\_DATA\_EXPERT (for reading, editing, and deleting data)
- AC\_ORG\_DATA\_EXPERT (for reading, editing, and deleting data)

#### (i) Note

To grant users access to features provided by SAP Business Network Asset Collaboration and Asset Central Foundation used in SAP Digital Manufacturing, you also need to add the users in the *Application Settings* app. For more information, see Application Settings.

For granular level information on predefined roles within the role templates AIN\_ORG\_DATA\_EXPERT and AC\_ORG\_DATA\_EXPERT, see Roles for SAP Intelligent Asset Management FLP.

#### → Tip

You can filter by role template, app, and/or launchpad group to determine the best combinations.

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Edge_Admin	-Execution	Edge Services	Manage Edge Devices	Assigned users can do the follow- ing:
					<ul> <li>View, create, edit, and de- lete edge de- vices</li> </ul>

#### Application Iden-

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Edge_Admin	-Execution	Edge Services	Monitor Edge Transactions	Assigned users can do the follow- ing: • View the transactions that have been routed from edge to cloud • Retry failed transactions
dmc	Edge_Productio n_Supervisor	-Execution	Edge Services	Monitor Edge Transactions	Assigned users can do the follow- ing: • View the transactions that have been routed from edge to cloud • Retry failed
dmc	Edge_Productio n_Operator	-Execution	Edge Services	Monitor Edge Transactions	transactions Assigned users can do the follow- ing: • View the transactions that have been routed from edge to cloud • Retry failed transactions
dmc	DMCI_SAC_User	-Insights	Manufacturing Insights	Manage Dashboards	Assigned users can do the follow- ing: • View, create, edit, and, de- lete data visu- alizations us- ing embedded SAP Analytics Cloud

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	DMCI_SAC_Admin	-Insights	Manufacturing Insights	Initialize Embedded Analytics	Assigned users can do the follow- ing:
					<ul> <li>Establish trust between the identity providers used by SAP Digital Manufacturin g for insights and SAP Analytics Cloud</li> </ul>
dmc	Manufacturing_ Admin	-Execution	Manufacturing Master Data Management	<i>Manage Set Points</i> app	Assigned users can do the follow- ing:
					<ul> <li>View, create, edit, and, de- lete set point groups</li> </ul>
dmc	Manufacturing_ Admin	-Execution	Manufacturing Master Data Management	Manage Routings/ Recipes app	Assigned users can do the follow- ing: • View, create, edit, and de- lete routings
					<ul> <li>View, edit, and delete recipes imported from inte- grated ERP systems</li> </ul>

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Eng ineer	-Execution	Manufacturing Master Data Management	Manage Routings/ Recipes app	Assigned users can do the follow- ing:
					<ul> <li>View, create, edit, and de- lete routings</li> <li>View, edit, and delete recipes</li> </ul>
					imported from inte- grated ERP systems
dmc	Production_Ope rator	-Execution	Manufacturing Master Data Management	Manage Routings/ Recipes app	Assigned users can do the follow- ing:
					<ul> <li>View routings</li> <li>View recipes imported from inte- grated ERP systems</li> </ul>
dmc	Production_Sup ervisor	-Execution	Manufacturing Master Data Management	Manage Routings/ Recipes app	Assigned users can do the follow- ing:
					<ul> <li>View routings, edit, and de- lete routings</li> <li>View recipes imported from inte- grated ERP systems</li> </ul>

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Manage Time Tracking	Assigned users can do the follow- ing: • Create, edit, delete, ap- prove, and view time re- cords for as- signed pro- duction oper- ators
dmc	Production_Ope rator	-Execution	Manufacturing Execution	Manage Time Tracking	Assigned users can do the follow- ing: • View their
dmc	Manufacturing_ Admin	-Execution	Manufacturing Execution	Launch PODs app	time records Assigned users can do the follow- ing: • Launch pro- duction oper- ator dash- boards (PODs)
dmc	Production_Eng ineer	-Execution	Manufacturing Execution	Launch PODs app	Assigned users can do the follow- ing: • Launch pro- duction oper- ator dash- boards (PODs)
dmc	Production_Ope rator	-Execution	Manufacturing Execution	Launch PODs app	Assigned users can do the follow- ing: Launch pro- duction oper- ator dash- boards (PODs)

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Launch PODs app	Assigned users can do the follow- ing: • Launch pro- duction oper- ator dash- boards (PODs)
dmc	Manufacturing_ Admin	-Execution	Manufacturing Configuration	Manage POD Users app	Assigned users can do the follow- ing: • View, create, edit, and de- lete the as- signment of users to pro- duction oper- ator dash- boards (PODs)
dmc	Production_Eng ineer	-Execution	Manufacturing Configuration	Manage POD Users app	Assigned users can do the follow- ing: • View, create, edit, and de- lete the as- signment of users to pro- duction oper- ator dash- boards (PODs)
dmc	Production_Ope rator	-Execution	Manufacturing Configuration	Manage POD Users app	Assigned users can do the follow- ing: • View produc- tion operator dashboards (PODs)

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Sup ervisor	-Execution	Manufacturing Configuration	Manage POD Users app	Assigned users can do the follow- ing: • View, create, edit, and de- lete the as- signment of users to pro- duction oper- ator dash- boards (PODs)
dmc	Production_Sup ervisor	-Execution	Manufacturing Configuration	Overlay Authoring Tool app	Assigned users can do the follow- ing: • View, create, edit, and de- lete projects and associ- ated objects • View and manage over- lays
dmc	Manufacturing_ Admin	-Execution	Manufacturing Configuration	Overlay Authoring Tool app	Assigned users can do the follow- ing: • View, create, edit, and de- lete projects and associ- ated objects
dmc	Production_Ope rator	-Execution	Manufacturing Configuration	Overlay Authoring Tool app	Assigned users can do the follow- ing: • View projects and associ- ated objects

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Sup ervisor	-Insights	Manufacturing Insights	Manage Alerts app	Assigned users can do the follow- ing: • Monitor alerts raised by the applications and initiate a corrective ac- tion on the alerts
dmc	Production_Eng ineer	-Insights	Manufacturing Insights Configuration	Manage Alert Type app	Assigned users can do the follow- ing: • View and manage alert types and ac- tions associ- ated with alerts
dmc	Production_Sup ervisor	-Insights	Manufacturing Insights Configuration	Manage Alert Type app	Assigned users can do the follow- ing: • View and manage alert types and ac- tions associ- ated with alerts
dmc	Global_Regiona l_Manager	-Insights	Manufacturing Insights Configuration	Manage Alert Type app	Assigned users can do the follow- ing: • View and manage alert types and ac- tions associ- ated with alerts

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Ope rator	-Insights	Manufacturing Insights Configuration	Manage Alert Type app	Assigned users can do the follow- ing:
					<ul> <li>View alert types and ac- tions associ- ated with alerts</li> </ul>
dmc	Production_Sup ervisor	-Manufacturing Automation	Manufacturing Automation	Configure Production Connectivity app	Assigned users can do the follow- ing:
					<ul> <li>View objects of the produc- tion connec- tivity model</li> </ul>
dmc	Production_Sup ervisor	-Manufacturing Automation	Manufacturing Automation	Manage Equipment Connectivity app	Assigned users can do the follow- ing:
					• View equip- ment connec- tivity
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Dispatching and Monitoring app	Assigned users can do the follow- ing:
					<ul> <li>Monitor, schedule, and dispatch op- erations on the shop floor</li> </ul>

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
ac_broker	AC_ORG_DATA_EX PERT	-Execution	Manufacturing Execution	Dispatching and Monitoring app	Roles required in addition to dmc Manufacturing_ Admin and Production_Sup ervisor roles.
					Assigned users can view indicators and work orders.
					Note that with these roles alone, you cannot use this app.
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Schedule Labor app	Assigned users can do the follow- ing:
					<ul> <li>Assign shifts and resources to the workers for a given calendar week</li> </ul>
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Manage Floor Stock app	Assigned users can do the follow- ing:
					<ul> <li>Receive, edit and view the floor stock</li> </ul>
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Manage Staging 2.0 app	Assigned users can do the follow- ing:
					<ul> <li>Stage materials configured with single-order or crossorder staging method</li> <li>View and check staging request status</li> </ul>

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Manage Logistics Orders app	Assigned users can do the follow- ing: • View, create and edit logis- tics orders
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Execute Logistics Orders app	Assigned users can do the follow- ing: • View and exe- cute logistics orders
dmc	Production_Sup ervisor	-Execution	Manufacturing Master Data Management	Manage Storage Locations app	Assigned users can do the follow- ing: • Create, edit, copy, and de- lete storage locations
dmc	Production_Ope rator	-Execution	Manufacturing Execution	View Labor Schedule app	Assigned users can do the follow- ing: • View the as- signments of workers for all shifts
dmc	Production_Eng ineer	-Insights	Manufacturing Insights	Manage Alerts app	Assigned users can do the follow- ing: • Monitor the alerts raised by the appli- cations and initiate a cor- rective action on the alerts

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Ope rator	-Insights	Manufacturing Insights	Manage Alerts app	Assigned users can do the follow- ing:
					• Monitor the alerts raised by the applications and initiate a corrective action on the alerts
dmc	Production_Eng ineer	-Manufacturing Automation	Manufacturing Automation	Configure Production Connectivity app	Assigned users can do the follow- ing:
					<ul> <li>View objects of the produc- tion connec- tivity model</li> </ul>
dmc	Production_Eng ineer	-Manufacturing Automation	Manufacturing Automation	Manage Web Serversapp	Assigned users can do the follow- ing:
					<ul> <li>View, create, and delete web servers</li> </ul>
					<ul> <li>Manage con- nections to other web servers</li> </ul>
dmc	Production_Eng ineer	-Manufacturing Automation	Manufacturing Automation	Manage Service Providers app	Assigned users can do the follow- ing:
					<ul> <li>View, create, update, and delete service providers</li> </ul>

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Eng ineer	-Insights	Technical Configuration and Integration	Manage Service Registry app	Assigned users can do the follow- ing: • View, create, edit, and de- lete service registry en- tries
dmc	Manufacturing_ Extension_Prov ider	-Insights	Technical Configuration and Integration	Manage Service Registry app	Assigned users can do the follow- ing: • View, create, edit, and de- lete service registry en- tries
dmc	Production_Eng ineer	-Manufacturing Automation	Manufacturing Automation	Manage Equipment Connectivity app	Assigned users can do the follow- ing: • View, create, update, and delete con- nectivity be- tween tags and equip- ment
dmc	Production_Eng ineer	-Execution	Manufacturing Execution	Manage Floor Stocks app	Assigned users can do the follow- ing: • Receive, edit, and view floor stock
dmc	Production_Eng ineer	-Execution	Manufacturing Master Data Management	Manage Storage Locations app	Assigned users can do the follow- ing: • Create, edit, copy, and de- lete storage locations

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Manufacturing_ Admin	-Manufacturing Automation	Manufacturing Automation	Design Production Processes app	Assigned users can do the follow- ing:
					<ul> <li>View cloud- based pro- duction proc- esses (cloud processes)</li> <li>View produc- tion proc- esses (auto- mation se- quences) based on the Production Connector / SAP Plant Connectivity</li> <li>Export and import pro- duction proc- ess designs with cloud processes and relevant services</li> <li>Manage users and work groups</li> </ul>
dmc	Automation_Eng ineer	-Insights	Technical Configuration and Integration	Manage Service Registry app	Assigned users can do the follow- ing:
					<ul> <li>View service registry en- tries</li> </ul>
dmc	Production_Ope rator	-Insights	Technical Configuration and Integration	Manage Service Registry app	Assigned users can do the follow- ing: • View service
					registry en- tries

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Sup ervisor	-Insights	Technical Configuration and Integration	Manage Service Registry app	Assigned users can do the follow- ing:
					<ul> <li>View service registry en- tries</li> </ul>
dmc	Automation_Eng ineer	-Manufacturing Automation	Manufacturing Automation	Manage Service Providers app	Assigned users can do the follow- ing:
					<ul> <li>View, create, update, and delete service providers</li> </ul>
dmc	Automation_Eng ineer	-Manufacturing Automation	Manufacturing Automation	Configure Production Connectivity app	Assigned users can do the follow- ing:
					<ul> <li>View, create, update, and delete objects of the produc- tion connec- tivity model</li> </ul>
dmc	Automation_Eng ineer	-Manufacturing Automation	Manufacturing Automation	Manage Web Servers app	Assigned users can do the follow- ing:
					<ul> <li>View, create, delete web servers</li> <li>Manage con- nections to</li> </ul>
					other web servers

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Automation_Eng ineer	-Manufacturing Automation	Manufacturing Automation	Manage Equipment Connectivity app	Assigned users can do the follow- ing:
					<ul> <li>View, create, update, and delete con- nectivity be- tween tags and equip- ment</li> </ul>
dmc	Automation_Eng ineer	-Execution	Manufacturing Execution	Manage Floor Stocks app	Assigned users can do the follow- ing:
					<ul> <li>Receive, edit, and view floor stock</li> </ul>
dmc	Automation_Eng ineer	-Execution	Manufacturing Execution	Manage Tool Assignments app	Assigned users can do the follow- ing:
					<ul> <li>Unassign or- ders and tools from a spe- cific resource</li> </ul>
dmc	Automation_Eng ineer	-Execution	Manufacturing Master Data Management	Manage Storage Locations app	Assigned users can do the follow- ing:
					View storage     locations
dmc	Global_Regiona l_Manager	-Insights	Manufacturing Insights	Manage Alerts app	Assigned users can do the follow- ing:
					<ul> <li>Monitor alerts raised by ap- plications and initiate cor- rective ac- tions for the alerts</li> </ul>

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Plant_Manager	-Insights	Manufacturing Insights	Manage Alerts app	Assigned users can do the follow- ing:
					<ul> <li>Monitor alerts raised by the applications and initiate corrective ac- tion for the alerts.</li> </ul>
dmc	Plant_Manager	-Insights	Manufacturing Insights Configuration	Manage Alert Type app	Assigned users can do the follow- ing:
					<ul> <li>View and manage the alert types and actions associated with alerts</li> </ul>
dmc	Plant_Manager	-Execution	Manufacturing Configuration	Manage Document Print Templates app	Assigned users can do the follow- ing:
					<ul> <li>Specify, edit, and delete the information that is availa- ble for print- ing</li> <li>Define, edit, and delete print formats</li> </ul>
ac_broker	DOCUMENT_DELET E	-Execution	Manufacturing Configuration	Manage Document Print Templates app	Assigned users can do the follow- ing:
					• Upload print template files from an inte- grated SAP Asset Intelli- gence Net- work system

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Plant_Manager	-Execution	Manufacturing Configuration	Manage Printers app	Assigned users can do the follow- ing: • Set up, edit, and delete printers to print various types of pro- duction-re- lated docu- ments
dmc	Plant_Manager	-Execution	Manufacturing Configuration	<i>Reprint</i> <i>Documents</i> app	Assigned users can do the follow- ing: • Reprint or view docu- ments that printed for specific SFCs or orders
dmc	PQM_Analytical _User	-Insights	AI/ML Scenarios Management	Manage Analytical Data Sets app	Assigned users can do the follow- ing: • Create, edit, delete, and clone analyti- cal data sets

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	PQM_Analytical _User	-Insights	Al/ML Scenarios Management	Manage AI/ML Scenarios app	<ul> <li>Assigned users can do the follow- ing:</li> <li>Create, edit, delete, and clone AI/ML scenarios</li> <li>Configure alerts to de- fine alert con- ditions</li> <li>Subscribe to alerts so that they are noti- fied whenever an alert is trig- gered</li> </ul>
dmc	PQM_Model_Mana ger	-Insights	Al/ML Scenarios Management	Manage Analytical Data Sets app	Assigned users can do the follow- ing: • Create, edit, delete, and clone analyti- cal data sets
dmc	PQM_Model_Mana ger	-Insights	Al/ML Scenarios Management	Manage Al/ML Scenarios app	<ul> <li>Assigned users can do the follow- ing:</li> <li>Create, edit, delete, and clone AI/ML scenarios for defect detec- tion and visual inspection.</li> <li>Configure alerts to de- fine alert con- ditions</li> <li>Subscribe to alerts so that they are noti- fied whenever an alert is trig- gered.</li> </ul>

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Manage Orders app	Assigned users can do the follow- ing: Create, edit, and view or- ders Release or- ders to create SFCs
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Manage Cancellations app	Assigned users can do the follow- ing:
					<ul> <li>View activity confirma- tions, EWM goods issues and EWM goods re- ceipts, and IM goods re- ceipts that are posted against the or- der</li> <li>Cancel activ- ity confirma- tions, EWM goods issues and EWM goods re- ceipts, and IM goods re- ceipts, and IM goods re- ceipts that are successfully posted against the or- der</li> </ul>

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Manage Resource Assignments app	Assigned users can do the follow- ing: • Assign orders to a resource • View a re- source with assigned or- ders
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Load Resources with Components app	Assigned users can do the follow- ing: Load compo- nents or floor stock invento- ries into the empty re- source bins Unload com- ponents or floor stock in- ventories from the loaded re- source bins
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Manage Holds app	Assigned users can do the follow- ing: • View SFCs placed on hold or re- leased from hold • Place SFCs on hold or re- lease SFCs from hold

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Work Center POD (Default) app	Assigned users can do the follow- ing: • Execute pro- duction activi- ties at the se- lected work center
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	<i>Operation POD</i> ( <i>Default</i> ) app	Assigned users can do the follow- ing: • Execute pro- duction at the selected oper- ation activity and resource
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Order POD (Default) app	Assigned users can do the follow- ing: • Execute pro- duction activi- ties for the se- lected proc- ess order
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Post-Production Reporting POD	Assigned users can do the follow- ing: • Execute pro- duction activi- ties for the se- lected proc- ess order
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Standalone Noconformance POD app	Assigned users can do the follow- ing: • View and log nonconfor- mances against SFCs.

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Quality Inspection Characteristic List plugin	Assigned users can do the follow- ing: • View inspec- tion charac- teristics • View summar- ized results
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Quality Inspection Results plugin	Assigned users can do the follow- ing: View single- value record- ings Record in- spection re- sults Upload and download at- tachments
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Manage Tool Assignments	Assigned users can do the follow- ing: Assign orders and tools to a specific re- source Unassign or- ders and tools from a spe- cific resource
dmc	Production_Sup ervisor	-Execution	Manufacturing Master Data Management	Manage BOMs app	Assigned users can do the follow- ing: • View, create, edit, and de- lete bills of materials (BOMs)

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Sup ervisor	-Execution	Manufacturing Master Data Management	Manage Routings (deprecated) app	Assigned users can do the follow- ing: • View, create, edit, and de- lete routings
dmc	Production_Sup ervisor	-Execution	Manufacturing Master Data Management	Manage Recipes (deprecated) app	Assigned users can do the follow- ing: • View recipes imported from SAP S/ 4HANA Cloud
dmc	Production_Sup ervisor	-Execution	Manufacturing Master Data Management	Manage Operation Activity Master app	Assigned users can do the follow- ing: • View, create, edit, and de- lete operation activities
dmc	Production_Sup ervisor	-Execution	Manufacturing Master Data Management	Manage Work Instructions app	Assigned users can do the follow- ing: • View, create, and edit work instructions
dmc	Production_Sup ervisor	-Execution	Manufacturing Master Data Management	Manage Materials app	Assigned users can do the follow- ing: • View, create, edit, and de- lete materials
dmc	Production_Sup ervisor	-Execution	Manufacturing Master Data Management	Manage Material Groups app	Assigned users can do the follow- ing: • View, create, edit, and de- lete material groups

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Sup ervisor	-Execution	Manufacturing Master Data Management	Manage Data Collection app	Assigned users can do the follow- ing:
					<ul> <li>View, create, edit, and de- lete data col- lection groups</li> </ul>
dmc	Production_Sup ervisor	-Execution	Manufacturing Master Data Management	Manage Resources app	Assigned users can do the follow- ing:
					<ul> <li>View, create, edit, and de- lete resources</li> </ul>
dmc	Production_Sup ervisor	-Execution	Manufacturing Master Data Management	Manage Resource Types app	Assigned users can do the follow- ing:
					• View, create, edit, and de- lete resource types
dmc	Production_Sup ervisor	-Execution	Manufacturing Master Data Management	Manage Work Centers app	Assigned users can do the follow- ing:
					<ul> <li>View, create, edit, and de- lete work cen- ters</li> </ul>
dmc	Production_Sup ervisor	-Execution	Manufacturing Master Data Management	Manage Shifts app	Assigned users can do the follow- ing:
					<ul> <li>View, create, edit, and de- lete shifts</li> </ul>

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Sup ervisor	-Execution	Manufacturing Master Data Management	Manage Set Points app	Assigned users can do the follow- ing: • View, create, edit, and de- lete set point groups
dmc	Production_Sup ervisor	-Execution	Manufacturing Master Data Management	Manage Tools	Assigned users can do the follow- ing: Create, edit, and view tools Define tool logging method Track tool us- age View tool schedules planned in Re- source Or- chestration (REO)
dmc	Production_Sup ervisor	-Execution	Manufacturing Master Data Management	Manage Carriers app	Assigned users can do the follow- ing: • View, create, and edit carri- ers
dmc	Production_Sup ervisor	-Execution	Manufacturing Configuration	Manage Nonconformance Codes app	Assigned users can do the follow- ing: • View, create, edit, and de- lete noncon- formance co- des

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
ac_broker	DOCUMENT_DELET E	-Execution	Manufacturing Execution	Data Collection plugin	Assigned users can do the follow- ing: • Upload im- ages when logging data collection pa- rameters
ain_broker	DOCUMENT_READ	-Execution	Manufacturing Execution	Header Information plugin	Assigned users can do the follow- ing: Display a ma- terial thumb- nail in the header infor- mation on a POD page in both the Work Center POD (Default) and the Operation POD (Default)
ac_broker	DOCUMENT_DELET E	-Execution	Manufacturing Execution	<i>NC Selection</i> plugin	Assigned users can do the follow- ing: • Upload im- ages when logging non- conformance codes
ac_broker	DOCUMENT_DELET E	-Execution	Manufacturing Execution	<i>NC Data Tree</i> plugin	Assigned users can do the follow- ing: • Upload im- ages when logging non- conformance codes

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Sup ervisor	-Execution	Manufacturing Configuration	Manage Nonconformance Groups app	Assigned users can do the follow- ing:
					<ul> <li>View, create, edit, and de- lete noncon- formance groups</li> </ul>
dmc	Production_Sup ervisor	-Execution	Manufacturing Configuration	Manage OEE Reason Codes app	Assigned users can do the follow- ing:
					<ul> <li>View, create, and edit OEE reason codes</li> </ul>
dmc	Production_Sup ervisor	-Execution	Manufacturing Configuration	Assign OEE Reason Codes app	Assigned users can do the follow- ing:
					<ul> <li>Assign OEE reason codes to resources</li> <li>Change the assignment of the OEE rea- son codes</li> </ul>
dmc	Production_Sup ervisor	-Execution	Manufacturing Configuration	Manage User Assignments app	Assigned users can do the follow- ing:
					<ul> <li>View user data, assign business at- tributes to users, and de- lete user set- tings</li> </ul>

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Sup ervisor	-Execution	Manufacturing Configuration	Manage Certifications app	Assigned users can do the follow- ing: • View, create, edit, and de- lete certifica- tions
dmc	Production_Sup ervisor	-Execution	Manufacturing Configuration	Manage Plants app	Assigned users can do the follow- ing: • View and cre- ate plants
dmc	Production_Sup ervisor	-Execution	Technical Configuration and Integration	Manage Business Settings app	Assigned users can do the follow- ing: • View and change busi- ness settings
dmc	Production_Sup ervisor	-Execution	Manufacturing Configuration	Manage Custom Data app	Assigned users can do the follow- ing: • View, create, edit, and de- lete custom field defini- tions
dmc	Production_Sup ervisor	-Execution	Manufacturing Configuration	Manage Data Types app	Assigned users can do the follow- ing: • Group data fields created in the <i>Manage</i> <i>Data Fields</i> app

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Sup ervisor	-Execution	Manufacturing Configuration	Manage Data Fields app	Assigned users can do the follow- ing: • View, create, edit, and de- lete data fields
dmc	Production_Sup ervisor	-Execution	Manufacturing Configuration	POD Designer app	Assigned users can do the follow- ing: • View, create, edit, and de- lete produc- tion operator dashboards (PODs)
dmc	Production_Sup ervisor	-Execution	Manufacturing Configuration	Manage OEE Time Model Configuration app	Assigned users can do the follow- ing: • View, create, and edit OEE time elements
dmc	Production_Sup ervisor	-Execution	Manufacturing Configuration	Manage Standard Rates app	Assigned users can do the follow- ing: • View, create, edit, and de- lete standard rates
dmc	Production_Sup ervisor	-Execution	Manufacturing Configuration	Assign Time Element Types app	Assigned users can do the follow- ing: Assign re- source sta- tuses to time element types Change the assignment of the resource statuses

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Sup ervisor	-Execution	Manufacturing Configuration	Manage Next Numbers app	Assigned users can do the follow- ing: • View, create, and edit num- bering pat-
					terns
dmc	Production_Sup ervisor	-Execution	Manufacturing Configuration	<i>Manage Buyoffs</i> app	Assigned users can do the follow- ing:
					<ul> <li>View, create, edit, and de- lete buyoffs</li> </ul>
dmc	Production_Ope rator	-Execution	Manufacturing Execution	Manage Orders app	Assigned users can do the follow- ing:
					View orders
dmc	Production_Ope rator	-Execution	Manufacturing Execution	Manage Cancellations app	Assigned users can do the follow- ing: • View activity confirma- tions, EWM goods issues and EWM goods re- ceipts, and IM goods re- ceipts that are posted against the or- der
dmc	Production_Ope rator	-Execution	Manufacturing Execution	Manage Resource Assignments app	Assigned users can do the follow- ing: • View a re- source with assigned or- ders

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Ope rator	-Execution	Manufacturing Execution	Manage Staging 2.0 app	Assigned users can do the follow- ing:
			<ul> <li>Stage materials configured with single-order or crossorder staging method</li> <li>View and check staging request status</li> </ul>		
dmc	Production_Ope rator	-Execution	Manufacturing Execution	Packing List plugin	Assigned users can do the follow- ing:
					• View and as- sign destina- tions to pack- ing units
					<ul> <li>Create pack- ing units</li> <li>Add items to packing units</li> </ul>
					<ul> <li>Remove items from packing units</li> </ul>
					<ul> <li>Close and un- pack a pack- ing unit</li> </ul>
					<ul> <li>Unload a packing unit</li> </ul>

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Packing List plugin	Assigned users can do the follow- ing: View and as- sign destina- tions to pack- ing units Create pack- ing units Add items to packing units Add items to packing units Remove items from packing units Close and un- pack a pack- ing unit Unload a packing unit
dmc	Production_Ope rator	-Execution	Manufacturing Execution	Process Lot plugin	Assigned users can do the follow- ing: • Add and re- move SFCs from process lots.
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Process Lot plugin	Assigned users can do the follow- ing: • Add and re- move SFCs from process lots.
dmc	Production_Eng ineer	-Execution	Manufacturing Execution	Process Lot plugin	Assigned users can do the follow- ing: • Add and re- move SFCs from process lots.

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Ope rator	-Execution	Manufacturing Execution	Process Lot List plugin	Assigned users can do the follow- ing:
					<ul> <li>View, create, and delete process lots.</li> </ul>
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Process Lot List plugin	Assigned users can do the follow- ing:
					<ul> <li>View, create, and delete process lots.</li> </ul>
dmc	Production_Eng ineer	-Execution	Manufacturing Execution	Process Lot List plugin	Assigned users can do the follow- ing:
					<ul> <li>View, create, and delete process lots.</li> </ul>
dmc	Production_Ope rator	-Execution	Manufacturing Execution	Execute Logistics Orders app	Assigned users can do the follow- ing:
					• View and exe- cute logistics orders
dmc	Production_Ope rator	-Execution	Manufacturing Execution	Logistics Order Creation plugin	Assigned users can do the follow- ing:
					<ul> <li>View assigned destinations to SFCs</li> </ul>
dmc	Production_Ope rator	-Execution	Manufacturing Execution	Load Resources with Components app	Assigned users can do the follow- ing:
					<ul> <li>View empty and loaded re- source bins</li> </ul>

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Ope rator	-Execution	Manufacturing Execution	Work Center POD (Default) app	Assigned users can do the follow- ing: • Execute pro- duction activi- ties at the se- lected work center
dmc	Production_Ope rator	-Execution	Manufacturing Execution	<i>Operation POD</i> ( <i>Default</i> ) app	Assigned users can do the follow- ing: • Execute pro- duction at the selected oper- ation activity and resource
dmc	Production_Ope rator	-Execution	Manufacturing Execution	Order POD (Default) app	Assigned users can do the follow- ing: • Execute pro- duction activi- ties for the se- lected proc- ess order
dmc	Production_Ope rator	-Execution	Manufacturing Execution	Post-Production Reporting POD app	Assigned users can do the follow- ing: • Execute pro- duction activi- ties for the se- lected proc- ess order
dmc	Production_Ope rator	-Execution	Manufacturing Execution	Standalone Nonconfromance POD app	Assigned users can do the follow- ing: • View or log nonconfor- mances against SFCs.

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Ope rator	-Execution	Manufacturing Execution	Quality Inspection Characteristic List plugin	Assigned users can do the follow- ing: • View inspec- tion charac- teristics • View summar- ized results
dmc	Production_Ope rator	-Execution	Manufacturing Execution	Quality Inspection Results plugin	Assigned users can do the follow- ing: • View single- value record- ing • Record in- spection re- sults • Upload and download at- tachments
dmc	Production_Ope rator	-Execution	Manufacturing Execution	Manage Tool Assignments	Assigned users can do the follow- ing: Assign orders and tools to a specific re- source Unassign or- ders and tools from a spe- cific resource
dmc	Production_Ope rator	-Execution	Manufacturing Master Data Management	Manage BOMs app	Assigned users can do the follow- ing: • View bills of materials (BOMs)

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Ope rator	-Execution	Manufacturing Master Data Management	Manage Routings (deprecated) app	Assigned users can do the follow- ing: • View routings
dmc	Production_Ope rator	-Execution	Manufacturing Master Data Management	Manage Recipes (deprecated) app	Assigned users can do the follow- ing: View recipes imported from SAP S/ 4HANA Cloud
dmc	Production_Ope rator	-Execution	Manufacturing Master Data Management	Manage Operation Activity Master app	Assigned users can do the follow- ing: • View opera- tion activities
dmc	Production_Ope rator	-Execution	Manufacturing Master Data Management	Manage Work Instructions app	Assigned users can do the follow- ing: • View work in- structions
dmc	Production_Ope rator	-Execution	Manufacturing Master Data Management	Manage Materials app	Assigned users can do the follow- ing: • View materi- als
dmc	Production_Ope rator	-Execution	Manufacturing Master Data Management	Manage Material Groups app	Assigned users can do the follow- ing: • View material groups
dmc	Production_Ope rator	-Execution	Manufacturing Master Data Management	Manage Data Collection app	Assigned users can do the follow- ing: View data col- lection groups

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Ope rator	-Execution	Manufacturing Master Data Management	Manage Resources app	Assigned users can do the follow- ing: • View resour- ces
dmc	Production_Ope rator	-Execution	Manufacturing Master Data Management	Manage Resource Types app	Assigned users can do the follow- ing: • View resource types
dmc	Production_Ope rator	-Execution	Manufacturing Master Data Management	Manage Work Centers app	Assigned users can do the follow- ing: • View work centers
dmc	Production_Ope rator	-Execution	Manufacturing Master Data Management	Manage Shifts app	Assigned users can do the follow- ing: • View shifts
dmc	Production_Ope rator	-Execution	Manufacturing Master Data Management	<i>Manage Carriers</i> app	Assigned users can do the follow- ing: • View carriers
dmc	Production_Ope rator	-Execution	Manufacturing Configuration	Manage Nonconformance Codes app	Assigned users can do the follow- ing: • View noncon- formance co- des
dmc	Production_Ope rator	-Execution	Manufacturing Configuration	Manage Nonconformance Groups app	Assigned users can do the follow- ing: • View noncon- formance groups

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Ope rator	-Execution	Manufacturing Configuration	Manage OEE Reason Codes app	Assigned users can do the follow- ing: • View OEE rea- son codes
dmc	Production_Ope rator	-Execution	Manufacturing Configuration	Assign OEE Reason Codes app	Assigned users can do the follow- ing: • View OEE rea- son code as- signments
dmc	Production_Ope rator	-Execution	Manufacturing Configuration	Manage User Assignments app	Assigned users can do the follow- ing: • View user data
dmc	Production_Ope rator	-Execution	Manufacturing Configuration	Manage Certifications app	Assigned users can do the follow- ing: • View certifica- tions
dmc	Production_Ope rator	-Execution	Manufacturing Configuration	Manage Plants app	Assigned users can do the follow- ing: • View plants
dmc	Production_Ope rator	-Execution	Technical Configuration and Integration	Manage Business Settings app	Assigned users can do the follow- ing: • View business settings
dmc	Production_Ope rator	-Execution	Manufacturing Configuration	Manage Custom Data app	Assigned users can do the follow- ing: • View custom field defini- tions

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Ope rator	-Execution	Manufacturing Configuration	Manage Data Types app	Assigned users can do the follow- ing:
					• View data fields created in the <i>Manage</i> <i>Data Fields</i> app
dmc	Production_Ope rator	-Execution	Manufacturing Configuration	Manage Data Fields app	Assigned users can do the follow- ing:
					<ul> <li>View data fields</li> </ul>
dmc	Production_Ope rator	-Execution	Manufacturing Configuration	POD Designer app	Assigned users can do the follow- ing:
					<ul> <li>View produc- tion operator dashboards (PODs)</li> </ul>
dmc	Production_Ope rator	-Execution	Manufacturing Configuration	Manage OEE Time Model Configuration app	Assigned users can do the follow- ing:
					• View OEE time elements
dmc	Production_Ope rator	-Execution	Manufacturing Configuration	Manage Standard Rates app	Assigned users can do the follow- ing:
					<ul> <li>View standard rates</li> </ul>

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Ope rator	-Execution	Manufacturing Configuration	Assign Time Element Types app	Assigned users can do the follow- ing: • Assign re- source sta- tuses to time element types • Change the assignment of the resource statuses
dmc	Production_Ope rator	-Execution	Manufacturing Configuration	Manage Next Numbers app	Assigned users can do the follow- ing: • View number- ing patterns
dmc	Production_Ope rator	-Execution	Manufacturing Configuration	Manage Buyoffs app	Assigned users can do the follow- ing: • View and log buyoffs
dmc	Production_Ope rator	-Execution	Manufacturing Execution	Manage Floor Stocks app	Assigned users can do the follow- ing: • Receive, edit, and view floor stock
dmc	Production_Ope rator	-Execution	Manufacturing Master Data Management	Manage Storage Locations app	Assigned users can do the follow- ing: • Create, edit, copy, and de- lete storage locations

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Eng ineer	-Manufacturing Automation	Manufacturing Automation	Monitor Production Processes app	Assigned users can do the follow- ing: • View the exe- cution result and progress of production processes • Terminate cloud proc- esses • View statistics report
dmc	Production_Sup ervisor	-Manufacturing Automation	Manufacturing Automation	Monitor Production Processes app	Assigned users can do the follow- ing: • View the exe- cution result and progress of production processes • Terminate cloud proc- esses • View statistics report
dmc	Production_Ope rator	-Manufacturing Automation	Manufacturing Automation	Monitor Production Processes app	Assigned users can do the follow- ing: • View the exe- cution result and progress of production processes • Terminate cloud proc- esses • View statistics report

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Plant_Manager	-Manufacturing Automation	Manufacturing Automation	Monitor Production Processes app	Assigned users can do the follow- ing:
					<ul> <li>View the exe- cution result and progress of production processes</li> <li>View statistics report</li> </ul>
dmc	Automation_Eng ineer	-Manufacturing Automation	Manufacturing Automation	Monitor Production Processes app	Assigned users can do the follow- ing:
				Processes app	<ul> <li>View the exe- cution result and progress of production processes</li> </ul>
dmc	Production_Sup ervisor	-Manufacturing Automation	Manufacturing Automation	Recover Production Processes app	Assigned users can do the follow- ing:
					<ul> <li>Search and retry produc- tion proc- esses termi- nated with er- ror</li> </ul>

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Eng ineer	-Manufacturing Automation	Manufacturing Automation	Production Process Administration app	Assigned users can do the follow- ing:
					<ul> <li>View, create, edit, and de- lete work groups</li> <li>Manage users in work groups</li> <li>Change the log level of cloud proc- esses</li> <li>Configure de- bug mode set- tings</li> <li>Configure booster mode settings</li> </ul>
					<ul> <li>Delete proc- ess instances</li> </ul>
					<ul> <li>Download ar- chived proc- ess instance logs</li> </ul>

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Automation_Eng ineer	-Manufacturing Automation	Manufacturing Automation	Production Process Administration app	Assigned users can do the follow- ing:
					<ul> <li>View, create, edit, and de- lete work groups</li> <li>Manage users in work groups</li> <li>Change the log level of production processes (automation sequences) based on the Production Connector / SAP Plant Connectivity</li> <li>Download ar- chived proc- ess instance logs</li> </ul>
dmc	Plant_Manager	-Manufacturing Automation	Manufacturing Automation	Production Process Administration app	Assigned users can do the follow- ing: Download ar- chived proc- ess instance

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Sup ervisor	-Manufacturing Automation	Manufacturing Automation	Production Process Administration app	<ul> <li>Assigned users can do the follow- ing:</li> <li>Change the log level of cloud proc- esses</li> <li>Configure booster mode settings</li> <li>Delete proc- ess instances</li> <li>Download ar- chived proc- ess instance logs</li> </ul>
dmc	Production_Eng ineer	-Execution	Manufacturing Execution	Manage Orders app	Assigned users can do the follow- ing: Create, edit, and view or- ders Release or- ders to create SFCs
dmc	Production_Eng ineer	-Execution	Manufacturing Execution	<i>Manage Staging</i> 2.0 app	Assigned users can do the follow- ing: • Stage materi- als configured with single-or- der or cross- order staging method • View and check staging request status

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Eng ineer	-Execution	Manufacturing Execution	<i>Manage Resource</i> <i>Setup</i> app	Assigned users can do the follow- ing: • View resour- ces with as- signed orders
dmc	Production_Eng ineer	-Execution	Manufacturing Execution	Load Resources with Components app	Assigned users can do the follow- ing: Load compo- nents or floor stock invento- ries into the empty re- source bins Unload com- ponents or floor stock in- ventories from the loaded re- source bins
dmc	Production_Eng ineer	-Execution	Manufacturing Execution	Work Center POD (Default) app	Assigned users can do the follow- ing: • Execute pro- duction activi- ties at the se- lected work center
dmc	Production_Eng ineer	-Execution	Manufacturing Execution	<i>Operation POD</i> ( <i>Default</i> ) app	Assigned users can do the follow- ing: • Execute pro- duction at the selected oper- ation activity and resource

Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
Production_Eng ineer	-Execution	Manufacturing Execution	Order POD (Default) app	Assigned users can do the follow- ing: • Execute pro- duction activi- ties for the se-
				lected proc- ess order
Production_Eng ineer	-Execution	Manufacturing Execution	Post-Production Reporting POD app	Assigned users can do the follow- ing: • Execute pro-
				<ul> <li>Execute pro- duction activi- ties for the se- lected proc- ess order</li> </ul>
Production_Eng ineer	-Execution	Manufacturing Execution	Standalone Nonconformance POD app	Assigned users can do the follow- ing:
				<ul> <li>View or log nonconfor- mances against SFCs.</li> </ul>
Production_Eng ineer	-Execution	Manufacturing Execution	Manage Tools	Assigned users can do the follow- ing:
				<ul> <li>Create, edit, and view tools</li> <li>Define tool logging meth- ods</li> <li>Track tool us- age</li> <li>View tool schedules planned in Re- source Or- chestration</li> </ul>
	Production_Eng ineer Production_Eng ineer Production_Eng ineer	Production_Eng -Execution ineer Production_Eng -Execution ineer Production_Eng -Execution ineer	Production_Eng       -Execution       Manufacturing         Production_Eng       -Execution       Manufacturing         ineer       -Execution       Manufacturing         Production_Eng       -Execution       Manufacturing	Production_Eng       Execution       Manufacturing Execution       Order POD (Default) app         Production_Eng       -Execution       Manufacturing Execution       Post-Production Reporting POD app         Production_Eng       -Execution       Manufacturing Execution       Post-Production Reporting POD app         Production_Eng       -Execution       Manufacturing Execution       Standalone Nonconformance POD app         Production_Eng       -Execution       Manufacturing Execution       Standalone Nonconformance POD app         Production_Eng       -Execution       Manufacturing Manage Tools       Manage Tools

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Eng ineer	-Execution	Manufacturing Execution	<i>Manage Carriers</i> app	Assigned users can do the follow- ing: • View, create, edit, and de- lete carriers
dmc	Production_Eng ineer	-Execution	Manufacturing Master Data Management	Manage BOMs app	Assigned users can do the follow- ing: • View, create, edit, and de- lete bills of materials (BOMs)
dmc	Production_Eng ineer	-Execution	Manufacturing Master Data Management	Manage Routings (deprecated) app	Assigned users can do the follow- ing: • View, create, edit, and de- lete routings
dmc	Production_Eng ineer	-Execution	Manufacturing Master Data Management	Manage Recipes (deprecated) app	Assigned users can do the follow- ing: • View, edit, and delete recipes imported from SAP S/ 4HANA Cloud
đmc	Production_Eng ineer	-Execution	Manufacturing Master Data Management	Manage Operation Activity Master app	Assigned users can do the follow- ing: • View, create, edit, and de- lete operation activities

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Eng ineer	-Execution	Manufacturing Master Data Management	Manage Work Instructions app	Assigned users can do the follow- ing: • View, create, and edit work instructions
dmc	Production_Eng ineer	-Execution	Manufacturing Master Data Management	Manage Materials app	Assigned users can do the follow- ing: • View, create, edit, and de- lete materials
dmc	Production_Eng ineer	-Execution	Manufacturing Master Data Management	Manage Material Groups app	Assigned users can do the follow- ing: • View, create, edit, and de- lete material groups
dmc	Production_Eng ineer	-Execution	Manufacturing Master Data Management	Manage Data Collection app	Assigned users can do the follow- ing: • View, create, edit, and de- lete data col- lection groups
dmc	Production_Eng ineer	-Execution	Manufacturing Master Data Management	Manage Resources app	Assigned users can do the follow- ing: • View, create, edit, and de- lete resources
dmc	Production_Eng ineer	-Execution	Manufacturing Master Data Management	Manage Resource Types app	Assigned users can do the follow- ing: • View, create, edit, and de- lete resource types

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Eng ineer	-Execution	Manufacturing Master Data Management	Manage Work Centers app	Assigned users can do the follow- ing: • View, create, edit, and de- lete work cen- ters
dmc	Production_Eng ineer	-Execution	Manufacturing Master Data Management	Manage Shifts app	Assigned users can do the follow- ing: • View, create, edit, and de- lete shifts
dmc	Production_Eng ineer	-Execution	Manufacturing Master Data Management	Manage Set Points app	Assigned users can do the follow- ing: • View, create, edit, and de- lete set point groups
dmc	Production_Eng ineer	-Execution	Manufacturing Master Data Management	Manage Tool Assignments	Assigned users can do the follow- ing: Assign orders and tools to a specific re- source Unassign or- ders and tools from a spe- cific resource
dmc	Production_Eng ineer	-Execution	Manufacturing Configuration	Manage Nonconformance Codes app	Assigned users can do the follow- ing: • View, create, edit, and de- lete noncon- formance co- des

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Automation_Eng ineer	-Execution	Manufacturing Configuration	Manage Nonconformance Codes app	Assigned users can do the follow- ing:
					<ul> <li>View noncon- formance co- des</li> </ul>
dmc	Production_Eng ineer	-Execution	Manufacturing Configuration	Manage Nonconformance Groups app	Assigned users can do the follow- ing:
					<ul> <li>View, create, edit, and de- lete noncon- formance groups</li> </ul>
dmc	Automation_Eng ineer	-Execution	Manufacturing Configuration	Manage Nonconformance Groups app	Assigned users can do the follow- ing:
					<ul> <li>View noncon- formance groups</li> </ul>
dmc	Production_Eng ineer	-Execution	Manufacturing Configuration	Manage OEE Reason Codes app	Assigned users can do the follow- ing:
					<ul> <li>View, create, and edit OEE reason codes</li> </ul>
dmc	Production_Eng ineer	-Execution	Manufacturing Configuration	Assign OEE Reason Codes app	Assigned users can do the follow- ing:
					• Assign OEE reason codes to resources
					<ul> <li>Change the assignment of the OEE rea- son codes</li> </ul>

Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
Production_Eng ineer	-Execution	Manufacturing Configuration	Manage User Assignments app	Assigned users can do the follow- ing:
				<ul> <li>View user data, assign business at- tributes to users, and de- lete user set- tings</li> </ul>
Production_Eng ineer	-Execution	Manufacturing Configuration	Manage Certifications app	Assigned users can do the follow- ing:
				<ul> <li>View, create, edit, and de- lete certifica- tions</li> </ul>
Production_Eng ineer	-Execution	Manufacturing Configuration	Manage Plants app	Assigned users can do the follow- ing:
				• View and cre- ate plants
Production_Eng ineer	-Execution	Technical Configuration and Integration	Manage Business Settings app	Assigned users can do the follow- ing:
				<ul> <li>View and change busi- ness settings</li> </ul>
Production_Eng ineer	-Execution	Manufacturing Configuration	Manage Custom Data app	Assigned users can do the follow- ing:
	Production_Eng ineer Production_Eng ineer Production_Eng ineer Production_Eng ineer	Production_Eng -Execution ineer Production_Eng -Execution ineer Production_Eng -Execution ineer Production_Eng -Execution ineer	Production_Eng       -Execution       Manufacturing Configuration         Production_Eng       -Execution       Technical Configuration and Integration         Production_Eng       -Execution       Technical Configuration         Production_Eng       -Execution       Manufacturing         Production_Eng       -Execution       Manufacturing         Production_Eng       -Execution       Manufacturing         Production_Eng       -Execution       Manufacturing         Production_Eng       -Execution       Manufacturing	Production_Eng       -Execution       Manufacturing Configuration       Manage User Assignments app         Production_Eng       -Execution       Manufacturing Configuration       Manage Manage Assignments app         Production_Eng       -Execution       Manufacturing Configuration       Manage Certifications app         Production_Eng       -Execution       Manufacturing Configuration       Manage Plants app         Production_Eng       -Execution       Technical Configuration and Integration       Manage Business Settings app         Production_Eng       -Execution       Technical Integration       Manage Business Settings app         Production_Eng       -Execution       Manufacturing Integration       Manage Business Settings app         Production_Eng       -Execution       Manufacturing       Manage Custom

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Eng ineer	-Execution	Manufacturing Configuration	Manage Data Types app	Assigned users can do the follow- ing:
					<ul> <li>Group data fields created in the Manage Data Fields app</li> </ul>
dmc	Production_Eng ineer	-Execution	Manufacturing Configuration	Manage Data Fields app	Assigned users can do the follow- ing: • View, create, edit, and de- lete data fields
dmc	Production_Eng ineer	-Execution	Manufacturing Configuration	POD Designer app	Assigned users can do the follow- ing: • View, create, edit, and de- lete produc- tion operator dashboards (PODs)
dmc	Production_Eng ineer	-Execution	Manufacturing Configuration	Manage OEE Time Model Configuration app	Assigned users can do the follow- ing: • View, create, and edit OEE time elements
dmc	Production_Eng ineer	-Execution	Manufacturing Configuration	Manage Standard Rates app	Assigned users can do the follow- ing: • View, create, edit, and de- lete standard rates

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Eng ineer	-Execution	Manufacturing Configuration	Assign Time Element Types app	Assigned users can do the follow- ing: Assign re- source sta- tuses to time element types Change the assignment of the resource statuses
dmc	Production_Eng ineer	-Execution	Manufacturing Configuration	Manage Next Numbers app	Assigned users can do the follow- ing: • View, create, and edit num- bering pat- terns
dmc	Production_Eng ineer	-Execution	Manufacturing Configuration	Manage Document Print Templates app	<ul> <li>Assigned users can do the follow- ing:</li> <li>Specify, edit, and delete the information that is availa- ble for print- ing</li> <li>Define, edit, and delete print formats</li> </ul>
dmc	Production_Eng ineer	-Execution	Manufacturing Configuration	Manage Printers app	Assigned users can do the follow- ing: • Set up, edit, and delete printers to print various types of pro- duction-re- lated docu- ments

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Eng ineer	-Execution	Manufacturing Configuration	Reprint Documents app	Assigned users can do the follow- ing: • Reprint or view docu- ments that were printed for specific SFCs or or- ders
dmc	Production_Eng ineer	-Execution	Manufacturing Configuration	Manage Buyoffs app	Assigned users can do the follow- ing: • View, create, and edit buy- offs
dmc	Manufacturing_ Admin	-Administration	Administration	License Usage Report app	Assigned users can do the follow- ing: • Monitor the resource con- sumption of the SAP Digital Manufacturin g license

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Manufacturing_ Admin	-Execution	Manufacturing Configuration	Configure Inspection Points app	Assigned users can do the follow- ing:
					<ul> <li>Create, change, dis- play and de- lete user field combinations for inspection points.</li> <li>Import and define valida- tion codes for inspection point valua- tion from inte- grated ERP systems.</li> </ul>
dmc	Manufacturing_ Admin	-Execution	Manufacturing Execution	Manage Orders app	Assigned users can do the follow- ing:
					<ul> <li>Create, edit, and view or- ders</li> </ul>
					<ul> <li>Release or- ders to create SFCs</li> </ul>

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Manufacturing_ Admin	-Execution	Manufacturing Execution	Manage Cancellations app	Assigned users can do the follow- ing:
					<ul> <li>View activity confirma- tions, EWM goods issues and EWM goods re- ceipts, and IM goods re- ceipts that are posted against the or- der</li> <li>Cancel activ- ity confirma- tions, EWM goods issues and EWM goods re- ceipts, and IM goods re- ceipts that are successfully posted against the or- der</li> </ul>
dmc	Manufacturing_ Admin	-Execution	Manufacturing Execution	Manage Resource Assignments app	Assigned users can do the follow- ing:
					<ul> <li>Assign orders to a resource</li> <li>View a resource</li> </ul>
					<ul> <li>View a re- source with assigned or- ders</li> </ul>

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Manufacturing_ Admin	-Execution	Manufacturing Execution	Load Resources with Components app	Assigned users can do the follow- ing:
					<ul> <li>Load components or floor stock inventories into the empty resource bins</li> <li>Unload components or floor stock inventories from the loaded resource bins</li> </ul>
dmc	Manufacturing_ Admin	-Execution	Manufacturing Execution	Manage Holds app	Assigned users can do the follow- ing:
					<ul> <li>View SFCs placed on hold or re- leased from hold</li> </ul>
					<ul> <li>Place SFCs on hold or re- lease SFCs from hold</li> </ul>
dmc	Manufacturing_ Admin	-Execution	Manufacturing Execution	Work Center POD (Default) app	Assigned users can do the follow- ing:
					Execute pro- duction activi- ties at the se- lected work center

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Manufacturing_ Admin	-Execution	Manufacturing Execution	<i>Operation POD (Default)</i> app	Assigned users can do the follow- ing:
					<ul> <li>Execute pro- duction at the selected oper- ation activity and resource</li> </ul>
dmc	Manufacturing_ Admin	-Execution	Manufacturing Execution	Order POD (Default) app	Assigned users can do the follow- ing:
					<ul> <li>Execute pro- duction activi- ties for the se- lected proc- ess order</li> </ul>
dmc	Manufacturing_ Admin	-Execution	Manufacturing Execution	Post-Production Reporting POD app	Assigned users can do the follow- ing:
					<ul> <li>Execute pro- duction activi- ties for the se- lected proc- ess order</li> </ul>
dmc	Manufacturing_ Admin	-Execution	Manufacturing Execution	Standalone Nonconformance POD app	Assigned users can do the follow- ing:
					<ul> <li>View or log nonconfor- mances against SFCs.</li> </ul>
dmc	Manufacturing_ Admin	-Execution	Manufacturing Execution	Dispatching and Monitoring app	Assigned users can do the follow- ing:
					<ul> <li>Monitor, schedule, and dispatch op- erations on the shop floor</li> </ul>

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Manufacturing_ Admin	-Execution	Manufacturing Execution	Schedule Labor app	Assigned users can do the follow- ing: • Assign shifts and resources to the workers
					for a given calendar week.
dmc	Manufacturing_ Admin	-Execution	Manufacturing Execution	Manage Tool Assignments	Assigned users can do the follow- ing:
					<ul> <li>Assign orders and tools to a specific re- source</li> <li>Unassign or- ders and tools from a spe- cific resource</li> </ul>
dmc	Manufacturing_ Admin	-Execution	Manufacturing Execution	Manage Staging 2.0 app	Assigned users can do the follow- ing:
					<ul> <li>Stage materials configured with single-order or crossorder staging method</li> <li>View and check staging request status</li> </ul>
dmc	Manufacturing_ Admin	-Execution	Manufacturing Execution	Manage Logistics Orders app	Assigned users can do the follow- ing:
					<ul> <li>View, create and edit logis- tics orders</li> </ul>

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Manufacturing_ Admin	-Execution	Manufacturing Execution	Execute Logistics Orders app	Assigned users can do the follow- ing: • View and exe- cute logistics orders
dmc	Manufacturing_ Admin	-Execution	Manufacturing Execution	Manage Transport Systems app	Assigned users can do the follow- ing: • View, create and edit transport sys- tems
dmc	Manufacturing_ Admin	-Execution	<i>Manufacturing</i> <i>Execution</i>	Packing List plugin	<ul> <li>Assigned users can do the follow- ing:</li> <li>View and as- sign destina- tions to pack- ing units</li> <li>Create pack- ing units</li> <li>Add items to packing units</li> <li>Remove items from packing units</li> <li>Close and un- pack a pack- ing unit</li> <li>Unload a packing unit</li> </ul>
dmc	Manufacturing_ Admin	-Execution	Manufacturing Execution	Process Lot plugin	Assigned users can do the follow- ing: • Add and re- move SFCs from process lots.

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Manufacturing_ Admin	-Execution	Manufacturing Execution	Process Lot List plugin	Assigned users can do the follow- ing: • View, create, and delete process lots.
dmc	Manufacturing_ Admin	-Execution	Manufacturing Execution	Logistics Order Creation plugin	Assigned users can do the follow- ing: • Assign desti- nations to SFCs
dmc	Manufacturing_ Admin	-Execution	Manufacturing Master Data Management	Manage BOMs app	Assigned users can do the follow- ing: • View, create, edit, and de- lete bills of materials (BOMs)
dmc	Manufacturing_ Admin	-Execution	Manufacturing Master Data Management	Manage Routings (deprecated) app	Assigned users can do the follow- ing: • View, create, edit, and de- lete routings
dmc	Manufacturing_ Admin	-Execution	Manufacturing Master Data Management	Manage Recipes (deprecated) app	Assigned users can do the follow- ing: • View, edit, and delete recipes imported from SAP S/ 4HANA Cloud

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Manufacturing_ Admin	-Execution	Manufacturing Master Data Management	Manage Operation Activity Master app	Assigned users can do the follow- ing: • View, create, edit, and de- lete operation activities
dmc	Manufacturing_ Admin	-Execution	Manufacturing Master Data Management	Manage Work Instructions app	Assigned users can do the follow- ing: • View, create, and edit work instructions
dmc	Manufacturing_ Admin	-Execution	Manufacturing Master Data Management	Manage Materials app	Assigned users can do the follow- ing: • View, create, edit, and de- lete materials
dmc	Manufacturing_ Admin	-Execution	Manufacturing Master Data Management	Manage Material Groups app	Assigned users can do the follow- ing: • View, create, edit, and de- lete material groups
dmc	Manufacturing_ Admin	-Execution	Manufacturing Master Data Management	Manage Data Collection app	Assigned users can do the follow- ing: • View, create, edit, and de- lete data col- lection groups
dmc	Manufacturing_ Admin	-Execution	Manufacturing Master Data Management	Manage Resources app	Assigned users can do the follow- ing: • View, create, edit, and de- lete resources

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Manufacturing_ Admin	-Execution	Manufacturing Master Data Management	Manage Resource Types app	Assigned users can do the follow- ing: • View, create,
					edit, and de- lete resource types
dmc	Manufacturing_ Admin	-Execution	Manufacturing Master Data Management	Manage Work Centers app	Assigned users can do the follow- ing:
					<ul> <li>View, create, edit, and de- lete work cen- ters</li> </ul>
dmc	Manufacturing_ Admin	-Execution	Manufacturing Master Data Management	Manage Shifts app	Assigned users can do the follow- ing:
					<ul> <li>View, create, edit, and de- lete shifts</li> </ul>
dmc	Manufacturing_ Admin	-Execution	Manufacturing Master Data Management	Manage Tools	Assigned users can do the follow- ing:
					<ul> <li>Create, edit, and view tools</li> <li>Define tool logging method</li> <li>Track tool us-</li> </ul>
					age • View tool schedules planned in Re- source Or-
					chestration (REO)

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Manufacturing_ Admin	-Execution	Manufacturing Master Data Management	<i>Manage Carriers</i> app	Assigned users can do the follow- ing:
					<ul> <li>View, create, edit, and de- lete carriers</li> </ul>
dmc	Manufacturing_ Admin	-Execution	Manufacturing Configuration	Manage Nonconformance Codes app	Assigned users can do the follow- ing:
					<ul> <li>View, create, edit, and de- lete noncon- formance co- des</li> </ul>
dmc	Manufacturing_ Admin	-Execution	Manufacturing Configuration	Manage Nonconformance Groups app	Assigned users can do the follow- ing:
					<ul> <li>View, create, edit, and de- lete noncon- formance groups</li> </ul>
dmc	Manufacturing_ Admin	-Execution	Manufacturing Configuration	Manage OEE Reason Codes app	Assigned users can do the follow- ing:
					• View, create, and edit OEE reason codes
dmc	Manufacturing_ Admin	-Execution	Manufacturing Configuration	Assign OEE Reason Codes app	Assigned users can do the follow- ing:
					<ul> <li>Assign OEE reason codes to resources</li> <li>Change the assignment of the OEE rea- son codes</li> </ul>

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Manufacturing_ Admin	-Execution	Manufacturing Configuration	Manage User Assignments app	Assigned users can do the follow- ing: • View user data, assign business at- tributes to users, and de- lete user set- tings
dmc	Manufacturing_ Admin	-Execution	Manufacturing Configuration	Manage Certifications app	Assigned users can do the follow- ing: • View, create, edit, and de-
					lete certifica- tions
dmc	Manufacturing_ Admin	-Execution	Manufacturing Configuration	Manage Plants app	Assigned users can do the follow- ing: • View and cre-
					ate plants
dmc	Manufacturing_ Admin	-Execution	Manufacturing Configuration	Manage Custom Data app	Assigned users can do the follow- ing:
					<ul> <li>View, create, edit, and de- lete custom field defini- tions</li> </ul>
dmc	Manufacturing_ Admin	-Execution	Manufacturing Configuration	Manage Data Types app	Assigned users can do the follow- ing:
					• Group data fields created in the Manage Data Fields app

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Manufacturing_ Admin	-Execution	Manufacturing Configuration	Manage Data Fields app	Assigned users can do the follow- ing: • View, create, edit, and de- lete data fields
dmc	Manufacturing_ Admin	-Execution	Manufacturing Configuration	POD Designer app	Assigned users can do the follow- ing: • View, create, edit, and de- lete produc- tion operator dashboards (PODs)
dmc	Manufacturing_ Admin	-Execution	Manufacturing Configuration	Manage OEE Time Model Configuration app	Assigned users can do the follow- ing: • View, create, and edit OEE time elements
dmc	Manufacturing_ Admin	-Execution	Manufacturing Configuration	Manage Standard Rates app	Assigned users can do the follow- ing: • View, create, edit, and de- lete standard rates
dmc	Manufacturing_ Admin	-Execution	Manufacturing Configuration	Assign Time Element Types app	Assigned users can do the follow- ing: Assign re- source sta- tuses to time element types Change the assignment of the resource statuses

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Manufacturing_ Admin	-Execution	Manufacturing Configuration	Manage Next Numbers app	Assigned users can do the follow- ing: • View, create, and edit num- bering pat- terns
dmc	Manufacturing_ Admin	-Execution	Manufacturing Configuration	Manage Document Print Templates app	Assigned users can do the follow- ing: • Specify, edit, and delete the information that is availa- ble for print- ing and de- fine, edit, and delete print formats
dmc	Manufacturing_ Admin	-Execution	Manufacturing Configuration	Manage Printers app	Assigned users can do the follow- ing: • Set up, edit, and delete printers to print various types of pro- duction-re- lated docu- ments
dmc	Manufacturing_ Admin	-Execution	Manufacturing Configuration	Reprint Documents app	Assigned users can do the follow- ing: • Reprint or view docu- ments that were printed for specific SFCs or or- ders.

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Manufacturing_ Admin	-Execution	Manufacturing Configuration	<i>Manage Buyoffs</i> app	Assigned users can do the follow- ing: • View, create,
					and edit buy- offs
dmc	Manufacturing_ Admin	-Execution	Technical Configuration and Integration	Manage Collaboration Links app	Assigned users can do the follow- ing:
					<ul> <li>Map direc- tives to a sys- tem action for use with the collaboration</li> </ul>
dmc	Manufacturing_ Admin	-Execution	Technical Configuration and Integration	Manage Collaboration Directives app	Assigned users can do the follow- ing:
					Create direc- tives by copy- ing existing ones to use with the col- laboration
dmc	Manufacturing_ Admin	-Execution	Technical Configuration and Integration	Integration Message Dashboard app	Assigned users can do the follow- ing:
					<ul> <li>View, process, and delete in- tegration messages</li> </ul>
					<ul> <li>Retry failed integration messages and submessages</li> </ul>

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Manufacturing_ Admin	-Execution	Technical Configuration and Integration	Manage Integration Workflows	Assigned users can do the follow- ing: • View and up- date the work- flow configu- rations for in- bound and outbound col- laboration
dmc	Manufacturing_ Admin	-Execution	Manufacturing Execution	Manage Floor Stock app	Assigned users can do the follow- ing: • Receive, edit, and view floor stock
dmc	Manufacturing_ Admin	-Execution	Manufacturing Master Data Management	Manage Storage Locations app	Assigned users can do the follow- ing: • Create, edit, copy, and de- lete storage locations
dmc	Manufacturing_ Admin	-Manufacturing Automation	Manufacturing Automation	Manage Automatic Triggers app	Assigned users can do the follow- ing: • View sub- scriptions, timers, and business rules
dmc	Manufacturing_ Admin	-Manufacturing Automation	Manufacturing Automation	Production Process Administration app	Assigned users can do the follow- ing: • View, create, edit, and de- lete work groups • Manage users in work groups

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Eng ineer	-Execution -Manufacturing Automation	Manufacturing Automation	Deploy Shop Floor Elements app	Assigned users can do the follow- ing:
					<ul> <li>View, create, edit, and de- lete deploy- ment groups</li> <li>Deploy and activate shop floor ele- ments</li> <li>Remove shop floor ele- ments from</li> </ul>
					deployment groups
					<ul> <li>Manage users in deployment groups</li> </ul>
					<ul> <li>View activity logs of shop floor ele- ments</li> </ul>

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Automation_Eng ineer	-Execution -Manufacturing Automation	Manufacturing Automation	Deploy Shop Floor Elements app	Assigned users can do the follow- ing:
					<ul> <li>View, create, edit, and de- lete deploy- ment groups</li> <li>Deploy and activate shop floor ele- ments</li> <li>Remove shop floor ele- ments from deployment groups</li> <li>Manage users in deployment groups</li> <li>View activity logs of shop floor ele- ments</li> </ul>
dmc	Manufacturing_ Admin	-Execution -Manufacturing Automation	Manufacturing Automation	Deploy Shop Floor Elements app	Assigned users can do the follow- ing: • View deploy- ment groups • Manage users in deployment groups

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc		-Manufacturing Automation	Manufacturing Automation	Manage Automatic Triggers app	Assigned users can do the follow- ing:
					<ul> <li>View sub- scriptions</li> </ul>
					<ul> <li>View, create, edit, copy, de- ploy, pause, resume, and</li> </ul>
					delete timers and business rules
dmc	Automation_Eng ineer	on_Eng -Manufacturing Automation	Manufacturing Automation	Manage Automatic Triggers app	Assigned users can do the follow- ing:
					<ul> <li>View timers and business rules</li> </ul>
					<ul> <li>View, create, edit, copy, de- ploy, pause, resume, and</li> </ul>
					delete sub- scriptions
ac_broker ain_broker	EQUIPMENT_READ INDICATOR_READ MODEL_READ TEMPLATE_READ	-Manufacturing Automation	Manufacturing Automation	Manage Automatic Triggers app	Roles required in addition to dmc Production_Eng ineer Or Automation_Eng ineer role
					Note that with these roles alone, you cannot use this app.

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Eng ineer	-Execution -Manufacturing Automation	Manufacturing Automation	Design Production Processes app	Assigned users can do the follow- ing:
					<ul> <li>View, create, edit, copy, and delete production process de- signs</li> <li>View, create, run, edit, download, and delete cloud proc- esses</li> <li>View, down- load, produc tion proc- esses (auto- mation se- quences) based on the Production Connector / SAP Plant Connectivity</li> </ul>
					<ul> <li>Export and import pro- duction proc ess designs with cloud processes and relevant services</li> </ul>
					<ul> <li>Import cloud processes and automa- tion sequen- ces from other production process designs</li> </ul>
					<ul> <li>Submit pro- duction proc</li> </ul>

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
					ess designs with cloud processes for deployment and activation • Debug cloud processes • Manage users and work groups • Manage error codes • View activity logs of pro- duction proc-
					ess designs

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Automation_Eng ineer	-Execution -Manufacturing Automation	Manufacturing Automation	Design Production Processes app	Assigned users can do the follow- ing:
					<ul> <li>View, create, edit, copy, and delete production process de- signs</li> <li>View, down- load, cloud processes</li> <li>View, create, run, edit, download, and delete production processes (automation sequences) based on the Production Connector / SAP Plant Connectivity</li> <li>Export pro- duction proc ess designs with cloud processes and relevant services</li> <li>Import auto- mation se- quences from other product tion proc ess designs</li> <li>Submit pro- duction proc ess designs with produc- tion proc- esses (auto-</li> </ul>

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
					<ul> <li>mation sequences)</li> <li>based on the</li> <li>Production</li> <li>Connector /</li> <li>SAP Plant</li> <li>Connectivity</li> <li>for deploy-</li> <li>ment and activation</li> <li>Manage users</li> <li>and work</li> <li>groups</li> <li>Manage error</li> <li>codes</li> <li>View activity</li> <li>logs of production process</li> <li>ss designs</li> </ul>
ac_broker ain_broker	DOCUMENT_READ EQUIPMENT_READ INDICATOR_READ AC_ORG_DATA_RE AD	-Execution -Manufacturing Automation	Manufacturing Automation	Design Production Processes app	Roles required in addition to dmc Production_Eng ineer Or Automation_Eng ineer role
					Note that with these roles alone, you cannot use this app.
dmc	Automation_Eng ineer	-Execution -Manufacturing Automation	Manufacturing Configuration	Manage Document Print Templates app	Assigned users can do the follow- ing: • Specify, edit, and delete the information that is availa- ble for print- ing • Define, edit, and delete print formats

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Automation_Eng ineer	-Execution	Manufacturing Configuration	Manage Printers app	Assigned users can do the follow- ing:
					<ul> <li>Set up, edit, and delete printers to print various types of pro- duction-re- lated docu- ments</li> </ul>
dmc	Automation_Eng ineer	-Execution	Manufacturing Master Data Management	Manage Carriers app	Assigned users can do the follow- ing:
					View carriers
dmc	Automation_Eng ineer	-Execution	Manufacturing Configuration	Reprint Documents app	Assigned users can do the follow- ing:
					<ul> <li>Reprint or view docu- ments that were printed for specific SFCs or or- ders</li> </ul>
dmc	Automation_Eng ineer	-Execution	Manufacturing Configuration	<i>Manage Buyoffs</i> app	Assigned users can do the follow- ing:
					<ul> <li>View, create, and edit buy- offs</li> </ul>

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
ac_broker	EQUIPMENT_DELE TE	-Manufacturing Automation	Manufacturing Automation	Manage Equipment Connectivity app	Roles required in addition to dmc roles.
	TEMPLATE_DELET E				Assigned users can do the follow- ing:
					<ul> <li>View, create, update, and delete con- nectivity be- tween tags and equip- ment</li> </ul>
ac_broker	EQUIPMENT_READ TEMPLATE_READ	-Manufacturing Automation	Manufacturing Automation	Manage Equipment Connectivity app	Roles required in addition to dmc roles.
					Assigned users can do the follow- ing:
					<ul> <li>View connec- tivity between tags and equipment</li> </ul>
ac_broker	DOCUMENT_READ	-Execution	Manufacturing Master Data Management	<i>Manage Materials</i> app	Assigned users can do the follow- ing:
					• View materi- als

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
ac_broker ain_broker	CONFIGURATION_ EDIT	-Administration	Administration	Application Settings app	Assigned users can do the follow- ing:
					<ul> <li>Add, view, and edit users</li> </ul>
					<ul> <li>Add, view, and edit invitee users</li> </ul>
					<ul> <li>Add and de- lete email do- mains for au- tomatic user onboarding</li> </ul>
					<ul> <li>Maintain the external IDs of integrated systems</li> </ul>
					<ul> <li>Manage exter- nal systems to add SAP IoT as an ex- termed external</li> </ul>
					<ul> <li>ternal system</li> <li>Change other application settings</li> </ul>

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
ac_broker ain_broker	CONFIGURATION_ DELETE	-Administration	Administration	Application Settings app	Assigned users can do the follow- ing:
					<ul> <li>Add, view, edit, and de- lete users</li> <li>Add and de- lete email do- mains for au- tomatic user onboarding</li> <li>Maintain the external IDs of integrated systems</li> <li>Manage exter- nal systems to add SAP loT as an ex- ternal system</li> <li>Change other application settings</li> </ul>
ac_broker	CONFIGURATION_ READ	-Administration	Administration	Application Settings app	Assigned users can do the follow- ing:
					<ul> <li>View users and other ap- plication set- tings</li> </ul>

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
ac_broker ain_broker	COMPANYPROFILE _DELETE	-Administration	Administration	Company Profile app	<ul> <li>Assigned users can do the follow- ing:</li> <li>View and edit the organiza- tion's com- pany profile</li> <li>Add and edit invitee organi- zations</li> <li>Add and edit subsidiaries</li> </ul>
ac_broker	COMPANYPROFILE _EDIT	-Administration	Administration	Company Profile app	Assigned users can do the follow- ing: • View and edit the organiza- tion's com- pany profile
ac_broker	COMPANYPROFILE _READ	-Administration	Administration	Company Profile app	Assigned users can do the follow- ing: • View the or- ganization's company pro- file
ac_broker ain_broker	DPP_AUTH	-Administration	Administration	Data Protection and Privacy app	Assigned users can do the follow- ing: • View your per- sonal data and the per- sonal data of other data subjects

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
ain_broker	PARTNERS_READ	-Administration	Administration	Business Partners app	Assigned users can do the follow- ing:
					• View the de- tails of busi- ness partners
ain_broker	DOCUMENT_READ	-Execution	Manufacturing Master Data Management	<i>Manage Materials</i> app	Assigned users can do the follow- ing:
					View material attachments
ac_broker	EQUIPMENT_READ	-Manufacturing Automation	Manufacturing Automation	Manage Automatic Triggers app	Roles are required in addition to dmc roles.
					Assigned users can do the follow- ing:
					<ul> <li>View sub- scriptions, timers, or business rules</li> </ul>
ac_broker	EQUIPMENT_DELE TE	-Manufacturing Automation	Manufacturing Automation	Manage Automatic Triggers app	Roles are required in addition to dmc roles.
	TEMPLATE_DELET E	_		Assigned users can do the follow- ing:	
					<ul> <li>View, create, update, and delete sub- scriptions, timers, or business rules</li> </ul>

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
ain_broker ac_broker iot_services	Production_Sup ervisor EQUIPTMENT_REA D	-Execution	Manufacturing Execution	Line Monitor POD (Default) app	Assigned users can do the follow- ing: • Monitor the
	TEMPLATE_READ Abstract_Model _Read				production line for a plant in the produc- tion, quality, asset, and OEE perspec- tives
dmc	Production_Eng ineer	-Execution	Manufacturing Configuration	Overlay Authoring Tool app	Assigned users can do the follow- ing:
					<ul> <li>View and manage over- lays</li> </ul>
dmc	Production_Ope rator	-Execution	Manufacturing Execution	Overlay Authoring Tool app	Assigned users can do the follow- ing: • View overlays
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Line Monitor Asset Overview plugin	Assigned users can do the follow- ing:
					<ul> <li>View an over- view of overall asset status for work cen- ters within a specific time range</li> </ul>

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Line Monitor Image Overlay plugin	Assigned users can do the follow- ing:
					<ul> <li>Display plant or work cen- ter informa- tion visually, based on a pre-config- ured Image Overlay Project</li> </ul>
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Line Monitor Selection plugin	Assigned users can do the follow- ing:
			Configure the Line Monitor Selection plu- gin and its rel- evant filters		
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Line Monitor OEE KPIs plugin	Assigned users can do the follow- ing:
					<ul> <li>View the Availability</li> <li>(%) factor, Performance</li> <li>(%) factor, and the Qual- ity (%) factor</li> <li>of work cen- ters or pro- duction lines</li> </ul>

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Line Monitor OEE Overview plugin	Assigned users can do the follow- ing: • View an over- view of the three OEE val- ues: Availabil- ity, Perform- ance, and Quality
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Line Monitor Order Summary plugin	Assigned users can do the follow- ing: • View the de- tails of an or- der
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Line Monitor Order Progress plugin	Assigned users can do the follow- ing: • View a bullet chart tracking the produc- tion progress based on the order selected by the user in the Line Moni- tor Selection plugin
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Line Monitor Production Overview plugin	Assigned users can do the follow- ing: • View an over- view of the overall orders status for var- ious work centers within a specific time range

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Line Monitor Quality Overview plugin	Assigned users can do the follow- ing:
					<ul> <li>View an over- view of the overall quality status of the production in various work centers in a specific time range</li> </ul>
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Line Monitor Top 5 Availability Losses (Parent Resources) plugin	Assigned users can do the follow- ing:
					<ul> <li>View the avail- ability losses details based on the work center se- lected by the user in the Line Monitor Selection plu- gin</li> </ul>
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Line Monitor Top 5 Availability Losses (By Resources) plugin	Assigned users can do the follow- ing:
					<ul> <li>View the avail- ability losses details for the resource chosen in the dropdown for the work cen- ter you se- lected in the Line Monitor Selection Plu- gin</li> </ul>

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Line Monitor Top 5 Performance Losses (Parent Resources) plugin	Assigned users can do the follow- ing:
		Resources) piugin	<ul> <li>View the per- formance losses details based on the work center selected by the user in the Line Monitor Selection plu- gin</li> </ul>		
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Line Monitor Yield and Scrap plugin	Assigned users can do the follow- ing:
			<ul> <li>View phase details based on the order you selected in the Line Monitor Se- lection plugin</li> </ul>		
dmc	Production_Sup ervisor	-Execution	Manufacturing Execution	Line Monitor Work Center Overview plugin	Assigned users can do the follow- ing:
					<ul> <li>Display de- tails about work centers in an overlay</li> </ul>

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Sup -Execution Manufacturing ervisor Execution Color plugin	Execution		Assigned users can do the follow- ing:	
		• Fetch the color fill infor- mation for overlay areas of an overlay rendering plu- gin, such as the Line Moni- tor Image Overlay plugin			
dmc	Production_Sup ervisor	-Insights	Manufacturing Insights	ng Order Report app	Assigned users can do the follow-
	Production_Eng ineer				<ul><li>Niew informa-</li></ul>
	Manufacturing_ Admin				tion about or- ders in the Or- der Report
	Global_Regiona l_Manager				арр
	Plant_Manager				
dmc	Production_Sup ervisor	-Insights	Manufacturing Insights	SFC Report app	Assigned users can do the follow-
	Production_Eng ineer				• View informa-
	Manufacturing_ Admin				tion about SFCs in the SFC Report
	Global_Regiona l_Manager				app
	Plant_Manager				

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
onemodel	Asset_Model_Ma nage	-Manufacturing Automation	Manufacturing Automation	Manage Asset Connectivity app	Roles required in addition to dmc roles.
					Assigned users can do the follow- ing:
			<ul> <li>View, create, update, and delete con- nectivity be- tween tags and asset in- dicators</li> </ul>		
onemodel	Asset_Model_Re ad	-Manufacturing Automation	Manufacturing Automation	Manage Asset Connectivity app	Roles required in addition to dmc roles.
					Assigned users can do the follow- ing:
			<ul> <li>View connec- tivity between tags and as- set indicators</li> </ul>		
dmc	Automation_Eng ineer	-Manufacturing Automation	Manufacturing Automation	Manage Asset Connectivity app	Assigned users can do the follow- ing:
					<ul> <li>View, create, update, and delete con- nectivity be- tween tags and asset in- dicators</li> </ul>

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Global_Regiona l_Manager	-Manufacturing Automation	Manufacturing Automation	Manage Asset Connectivity app	Assigned users can do the follow- ing:
					<ul> <li>View, create, update, and delete con- nectivity be- tween tags and asset in- dicators</li> </ul>
dmc	Production_Eng ineer	-Manufacturing Automation	Manufacturing Automation	Manage Asset Connectivity app	Assigned users can do the follow- ing:
					<ul> <li>View, create, update, and delete con- nectivity be- tween tags and asset in- dicators</li> </ul>
dmc	Production_Sup ervisor	-Manufacturing Automation	Manufacturing Automation	Manage Asset Connectivity app	Assigned users can do the follow- ing:
					• View asset connectivity
dmc	Manufacturing_ Admin	-Manufacturing Execution	Manufacturing Master Data Management	Manage Barcode Settings app	Assigned users can do the follow- ing:
					<ul> <li>Scan, read, and manage barcode con- figurations</li> </ul>
dmc	Production_Eng ineer	-Manufacturing Execution	Manufacturing Master Data Management	Manage Barcode Settings app	Assigned users can do the follow- ing:
					<ul> <li>Scan, read, and manage barcode con- figurations</li> </ul>

Application Iden- tifier	Role Template	Area / Capability	Launchpad Group	App/Plugin	Permissions
dmc	Production_Ope rator	-Manufacturing Execution	Manufacturing Master Data Management	Manage Barcode Settings app	Assigned users can do the follow- ing: • Scan, read, and manage barcode con- figurations
dmc	Production_Sup ervisor	-Manufacturing Execution	Manufacturing Master Data Management	Manage Barcode Settings app	Assigned users can do the follow- ing: • Scan, read, and manage barcode con- figurations
dsc-reuse- services- quality dsc-reuse- services-prod dsc-reuse- services-az- quality dsc-reuse- services-az- prod	Alert_Display	-Execution	Manufacturing Configuration	Manage Mail Server Configurations app	Assigned users can do the follow- ing: • View mail server config- uration details used to send automated emails in re- sponse to alerts
dsc-reuse- services- quality dsc-reuse- services-prod dsc-reuse- services-az- quality dsc-reuse- services-az- prod	Alert_Admin	-Execution	Manufacturing Configuration	Manage Mail Server Configurations app	Assigned users can do the follow- ing: • Configure and manage mail server config- urations used to send auto- mated emails in response to alerts

# 6.3.2 Role Templates (Object-Based)

Find out about available role templates for business objects and the permissions each role template has.

### **Overview**

The table contains an overview of all role templates for data and business objects that are available for SAP Digital Manufacturing.

To use object-based role templates to authorize users, you must always assign the Launchpad\_Access and Plant\_Read role templates to the users. These role templates ensure that your users have access to the SAP Digital Manufacturing launchpad and your plants.

Role Template	Description
Launchpad_Access	You can access the SAP Digital Manufacturing launchpad.
Plant_Read	You can view the following data and business objects:
	Certification
	Custom field definition
	• Plant
	Resource
	Resource bin
	• Shift
	Storage location
	• User
	Work center
	Level of access: READ
Plant_Manage	You can view, create, and modify the following data and busi- ness objects:
	Certification
	Custom field definition
	Plant
	Resource
	Resource bin
	• Shift
	Storage location
	• User
	Work center
	Level of access: READ, MANAGE

Role Template	Description
Alerts_Admin	You can view, create, and modify the following entities: <ul> <li>Alert</li> <li>Alert type</li> <li>Property set type</li> </ul> Level of access: READ, MANAGE
Alerts_Viewer	You can view the following entities: <ul> <li>Alert</li> <li>Alert type</li> <li>Property set type</li> </ul> Level of access: READ
Asset_Model_Manage	You can view, create, and modify the following entities: <ul> <li>Asset</li> <li>Asset type</li> <li>Structure</li> <li>Attribute</li> <li>Indicator</li> <li>Codelist</li> </ul> Level of access: READ, MANAGE
Asset_Model_Read	You can view the following entities: • Asset • Asset type • Structure • Attribute • Indicator • Codelist Level of access: READ
Data_Collection_Read	You can view the following business object: <ul> <li>Data collection</li> </ul> Level of access: READ
Data_Collection_Manage	You can view, create, and modify the following business object: • Data collection Level of access: READ, MANAGE

Role Template	Description
Electronic_Signature_Sign	You can create the following entity:
	Electronic signature
	Level of access: CREATE
Electronic_Signature_Read	You can view the following business object:
	Electronic signature
	Level of access: READ
Equipment_Read	You can view the following business object:
	• Equipment
	Level of access: READ
Nonconformance_Read	You can view the following business object:
	Nonconformance
	Level of access: READ
Nonconformance_Manage	You can view, create, and modify the following business object:
	Nonconformance
	Level of access: READ, MANAGE
POD_Configuration_Read	You can view the following data object:
	POD configuration data
	Level of access: READ
POD_Configuration_Manage	You can view, create, and modify the following data object:
	POD configuration data
	Level of access: READ, MANAGE

Role Template	Description
Product_Read	You can view the following data and business objects:
	Bill of material
	Custom value
	Data field
	Data type
	ERP control key
	• Formula (including calculation data)
	• Material (including child objects such as packing data)
	Material group
	Master operation activity
	Production version
	Recipe
	Routing
	Standard rate
	Unit of measure
	Level of access: READ
Product_Manage	You can view, create, and modify the following data and busi- ness objects:
	Bill of material
	Custom value
	Data field
	• Data type
	ERP control key
	• Formula (including calculation data)
	• Material (including child objects such as packing data)
	Material group
	Master operation activity
	Production version
	Recipe
	Routing
	Standard rate
	Unit of measure
	Level of access: READ, MANAGE
SetPoint_Read	You can view the following business object:
	Set point
	Level of access: READ

Role Template	Description
SetPoint_Manage	You can view, create, and modify the following business ob- ject:
	Set point
	Level of access: READ, MANAGE
Work_Instruction_Read	You can view data of the following business object:
	Work instruction
	Level of access: READ
Work_Instruction_Manage	You can view, create, and modify the following business ob- ject:
	Work instruction
	Level of access: READ, MANAGE

# 6.3.3 Define Plant-Specific Authorizations

Learn how to authorize access to certain apps by plant.

In SAP Digital Manufacturing, users can access all apps they're authorized to use in all plants. However, for certain apps you can authorize access by plant. In addition, you can define whether users are authorized to manage (create, edit, delete, and view) or only view data.

# Overview

You can define plant-specific authorizations for the following apps:

- Plant settings on the SAP Digital Manufacturing launchpad
- Manage User Assignments
- Integration Message Dashboard
- Manage Orders
- Manage Data Collection
- Manage Set Points

You use the role template Plant\_Access to implement plant-specific authorizations. The role template has two attributes Plant\_Manage and Plant\_Read that you can use to define the authorization level. Plant\_Manage enables users to create, edit, delete, and view data; Plant\_Read authorizes them to view data.

#### Create a Role

In order to define plant-specific authorizations, you first create a role based on the role template Plant\_Access in the subaccount of the SAP Business Technology Platform that you used to deploy SAP

Digital Manufacturing. Using the attributes Plant\_Manage and Plant\_Read, you define the authorization level for the role. For more information on creating roles using attributes, see Attributes.

#### Create a Role Collection

In the next step, you create a role collection. This role collection consists of the role that defines the plantspecific authorization level and a role based on a role template that authorizes access to the apps. For instance, the role template Production\_Engineer enables business users to work with the *Manage Set Points* app. For information on the available role templates, see Role Templates (Persona-Based) [page 15].

#### Assign the Role Collection

In the final step, you assign the role collection to users or user groups.

#### Additional Information

If you don't define plant-specific authorizations, users have access to all plants. If you inadvertently assign both attributes Plant\_Manage and Plant\_Read for the same plant to a role, Plant\_Manage takes precedence.

#### O Note

Plant-specific authorizations don't control the visibility of apps on the SAP Digital Manufacturing launchpad. That means that users that aren't authorized to use apps, can still see them. If they try to access the apps, the system displays an error message. Similarly, if users that have read-only access to an app attempt to create, edit or delete data in the app, the system displays an error message.

#### **Examples**

You have two plants: 1000 and 2000.

• You want user A to collect data and define set points in plant *1000*. User A shouldn't have access to any other plants.

You create a role collection that contains a role based on the role template Plant\_Access with attribute Plant\_Manage: 1000 and a role based on the Production\_Engineer role template.

You want user A to collect data and define set points in plant 1000. User A should also be able to view data in plant 2000.
 You create a role collection that contains a role based on the role template Plant\_Access with attribute

Plant\_Manage 1000, Plant\_Read 2000, and a role based on the Production\_Engineer role template.

- You want user A to collect data in plant 1000 but user A shouldn't be able to define set points in plant 1000. This type of authorization isn't possible as the Production\_Engineer role template enables users to manage data in both the *Manage Data Collection* and *Manage Set Points* app. You can't restrict access to business objects by app.
- You want user A to be able to collect data and define set points in all plants. You assign a role based on the Production\_Engineer role template.

# 6.4 Manage Users and Authorization

After provisioning of SAP Digital Manufacturing is complete for your organization, you can configure authorization using role collections and assign users to relevant role collections.

# Context

To manage users and authorization, you can use any of the following methods:

- Use SAP Cloud Identity Services Identity Authentication for user management and map role collections to user groups
   This is recommended for the use of SAP Digital Manufacturing. For more information, see Manage Users
   Using SAP Cloud Identity Services - Identity Authentication [page 116].
- Use your own corporate identity provider to provide identity authentication directly
- Use SAP Cloud Identity Services Identity Authentication as a proxy to delegate the authentication to your own corporate identity provider

For the last two methods, refer to the user assistance of SAP Cloud Identity Services - Identity Authentication and the documentation for your own corporate identity provider.

For information on the best practices recommended for user management on the SAP Business Technology Platform, refer to Setting Up Your Security and Compliance Model.

# 6.4.1 Manage Users Using SAP Cloud Identity Services -Identity Authentication

Using the SAP Cloud Identity Services - Identity Authentication service, you can delegate identity authentication to an identity provider (IdP). In addition, by mapping role collections that define permissions to user groups in the IdP tenant, you can manage authorization in a more flexible way.

# 6.4.1.1 Configure Identity Federation and Trust

Use your SAP Cloud Identity Services - Identity Authentication tenant as an identity provider or a proxy to your own identity provider hosting your business users. This method uses Open ID Connect (OIDC) to establish trust.

To establish trust using OIDC, you first use a wizard in the SAP BTP cockpit to configure trust to your SAP Cloud Identity Services - Identity Authentication tenant as an identity provider. For more information, refer to Establish Trust and Federation Between SAP Authorization and Trust Management Service and Identity Authentication [page 117]. Subsequently, you configure attributes that are sent from the tenant to SAP Digital Manufacturing. For more information, refer to Add Attribute for User Groups in Identity Authentication Tenant [page 118]. Using OIDC is the recommended method to configure trust and federation and the approach described in this topic.

There's an alternative method that you can use to manually establish trust and federation between the *SAP Authorization and Trust Management Service* and SAP Cloud Identity Services - Identity Authentication. In this case, you exchange SAML metadata to establish trust with the SAP Cloud Identity Services - Identity Authentication tenant. You then register your subaccount with the tenant. For more information, refer to Manually Establish Trust and Federation Between SAP Authorization and Trust Management Service and Identity Authentication.

If you have already established trust and federation manually using SAML protocol and would like to migrate to OIDC trust, refer to Migrate from SAML Trust Configuration to OpenID Connect Trust with Identity Authentication

### **Related Information**

Trust and Federation Options with SAP Business Technology Platform Federation Attribute Settings of Any Identity Provider

# 6.4.1.1.1 Establish Trust and Federation Between SAP Authorization and Trust Management Service and Identity Authentication

As an SAP Business Technology Platform subaccount administrator, configure trust to an SAP Cloud Identity Services - Identity Authentication tenant as an identity provider.

### **Prerequisites**

- You're a subaccount administrator or a security administrator of the subaccount in which you've subscribed to SAP Digital Manufacturing.
- You've a SAP Cloud Identity Services Identity Authentication tenant.

#### O Note

You automatically receive a tenant when you subscribe to SAP Digital Manufacturing.

• The SAP Cloud Identity Services - Identity Authentication tenant is associated with the customer IDs of the relevant global account of SAP Business Technology Platform.

# Procedure

1. In the SAP BTP cockpit, go to the subaccount in which you've subscribed to SAP Digital Manufacturing and choose Security Trust Configuration .

- 2. Choose Establish Trust. The Configure Tenant wizard opens.
- 3. Choose the SAP Cloud Identity Services Identity Authentication tenant. The identity providers listed are the SAP Cloud Identity Services Identity Authentication tenants associated with your customer ID. Continue with *Next*.
- 4. Choose the domain configured with the SAP Cloud Identity Services Identity Authentication tenant and continue with *Next*.
- 5. You can change the name and the description of the tenant, display the resulting origin key, and enter a link text for user logon. Continue with *Next*.
- 6. Review your configuration and confirm using *Finish*.

### Results

You've configured trust in your tenant of the SAP Cloud Identity Services - Identity Authentication service, which is your identity provider. SAP Cloud Identity Services - Identity Authentication creates an application with the prefix *SAP BTP subaccount* and the display name of your subaccount in the administration console of SAP Cloud Identity Services - Identity Authentication.

#### Example

If your subaccount is named *My Subaccount*, the resulting application in SAP Cloud Identity Services - Identity Authentication is *SAP BTP subaccount My Subaccount*. Older applications start with *XSUAA\_*.

# **Next Steps**

Add an attribute for user groups in the administration console of your SAP Cloud Identity Services - Identity Authentication tenant.

# 6.4.1.1.2 Add Attribute for User Groups in Identity Authentication Tenant

Configure an attribute for user groups in your Identity Authentication tenant.

# Context

Configure an attribute for user groups. You can use this attribute to enable mappings between role collections in the SAP Business Technology Platform subaccount and the user groups for authorization management.

# Procedure

- 1. Log on to the administration console of your Identity Authentication tenant.
- 2. Choose Applications & Resources and then the application you created previously.
- 3. On the Trust tab, choose Subject Name Identifier and select the Primary Attribute Email.
- 4. On the *Trust* tab, choose *Attributes* and then *Add*.
- 5. Add the attribute *Groups*.

Self-defined Attributes		Collapse All Expand All	Add
Name	Source	Value	
~ Groups			+
	Identity Direc V	Groups	创
✓ first_name			+
	Identity Direc 🗸	First Name 🗸	创

The *Source* for the *Primary Attribute* and the *Attribute* depends on your configuration. For more information, refer to User Attributes.

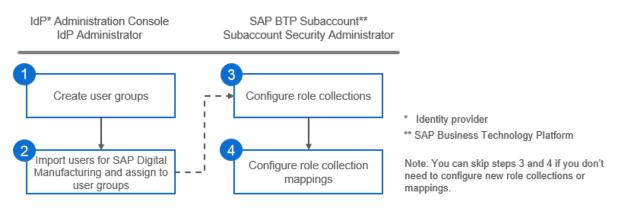
6. Save your entry.

# 6.4.1.2 Manage Users and Authorization

This section describes how you map users to role collections.

### Context

The diagram illustrates the typical workflow:



# 6.4.1.2.1 Create User Groups

By creating user groups in the Identity Authentication tenant, you can organize users and manage authorization more efficiently.

# Context

You can map the user groups to the role collections in the SAP Business Technology Platform subaccount. Permissions to the SAP Digital Manufacturing application are controlled based on the mappings.

You only need to create user groups and imports users if you're using the Identity Authentication tenant as your identity provider. If you're only using the Identity Authentication tenant to federate to a custom identity provider, you don't need to follow these two steps.

#### Procedure

- 1. Log on to the administration console for the tenant.
- 2. Under Users & Authorizations, choose User Groups.
- 3. Add user groups.

# **Next Steps**

You can add users manually to user groups or assign users to user groups while importing the users.

# 6.4.1.2.2 Import Users for SAP Digital Manufacturing

As the administrator of an SAP Cloud Identity Services - Identity Authentication tenant, you can import users of SAP Digital Manufacturing using a CSV file.

### **Prerequisites**

- You're assigned the Manage Users role for the tenant.
- You've created user groups that correspond to the role collections in the SAP Business Technology Platform subaccount.
- You've prepared a CSV file for import.
   If you enter the data in the CSV file as text, you must separate the entries with commas. If you enter more than 1 value in a single entry, separate the values within the entry with commas and enclose the entry in quotation marks.

Be sure to keep the entry headers in the CSV file. In addition, leave no spaces between the entries.

#### ▲ Caution

If you want to update a user using a CSV file, include the new information and also repeat all information that remains unchanged. If you include only new information, the information that isn't repeated is deleted.

#### Example

Prepare the following CSV file:

```
status,mail,firstName,lastName,groups
active,anderson.adams@example.com,Anderson,Adams,"DMC_Admin,DMC_User"
active,maria.lin@example.com,Maria,Lin,DMC_User
```

For a full list of supported attributes, see SAP Cloud Identity Services - Identity Authentication.

### Context

Using the import function, you can assign users to an application while managing authorization and user status.

You can also add users manually ( Users & Authorizations User Management Add User ) to the IAS tenant. However, the users don't automatically get access to an application with *Private* access control, which

is required for productive environments. To assign a user to such an application, you must still use the import function.

In addition, manually added users don't automatically get required authorizations - group assignments - to access the application.

For more information about user management in SAP Cloud Identity Services - Identity Authentication, see User Management.

### Procedure

- 1. Log on to the administration console for the tenant.
- 2. Under Users & Authorizations, choose Import Users.
- 3. In the application list, select the application representing SAP Digital Manufacturing.
- 4. Browse to the CSV file and then choose Import.
- 5. To send activation emails to the imported users, choose Send E-Mails Send .

# 6.4.1.2.3 Configure Role Collection Mappings

As an SAP Business Technology Platform subaccount administrator, configure role collection mappings by assigning role collections to user groups created in your Identity Authentication tenant. The users within the user groups get the authorizations defined by the role collections.

#### **Prerequisites**

You've obtained the names of the relevant user groups from the administrator of the Identity Authentication tenant.

### O Note

You need the **names**, not the **display names**.

### Procedure

- 1. Go to your subaccount.
  - a. Log on to the SAP BTP cockpit and select a region.
  - b. Select a global account.
  - c. Select a subaccount.
- 2. Choose Security Trust Configuration .

3. Choose the trust configuration for your Identity Authentication tenant.

🟠 Trans Breast Hell, Canada 🖉 Taglat Helefoldsamg Canada 🕫 🖉 🕹 Hell an					
ଧ୍ରି Subaccount:					☆
New Trust Configuration				Search	
Status	Name	Description	Origin Key	Actions	
Default					
Inactive	SAP ID Service	Default identity provider	ldap	1 1	
Custom					
Active	My IDP		Agest manufacturing accounts ALL on	1 1	

- 4. Choose Role Collection Mappings.
- 5. Choose New Role Collection Mapping.
- 6. In the *Create Role Collection Mapping* window, select a role collection, enter **Groups** in the *Attribute* field, and the name of a user group in the *Value* field.

Create Role Collection Mapping			
Role Collection: Attribute: *	Production_Engineer Groups	~	
Operator: Value:*	equals DemoUserGroup		
	Save	Cancel	

7. Save the role collection mapping.

# 6.5 Onboard Your Organization

As an administrator and the first user of the SAP Digital Manufacturing application, you onboard your organization to the application.

### Prerequisites

You've at least one role assigned for the SAP Digital Manufacturing application.

# Context

In this step, you're asked to fill in some information about your organization. You can update this information at any time in the *Company Profile* app.

### ▲ Caution

This activity is only required for tenants hosted on Amazon Web Services.

### Procedure

- 1. Log on to the application. You're navigated to the Organization Onboarding page.
- 2. Complete the required information.

Section	Field	Description
Company Details	[Required] Company Name	The company name must be unique for SAP Digital Manufacturing.
	[Required] Website	
	[Required] <i>Roles</i>	By default your organization is on- boarded as an <i>Operator</i> . This means that you can import assets from Asset Central Foundation. If you want to onboard equipment that isn't de- fined in SAP Business Network Asset Collaboration, choose <i>Manufacturer</i> . You can choose several roles for your organization. You can change the roles assigned to your organization in the <i>Company Profile</i> app.
		• Note Information regarding Asset Central Foundation apps and fea- tures that you can find in this guide, only applies to tenants pro- visioned using the Asset Central Model.
	Country/Region	
Primary Contact Person	First Name	
	Title / Last Name	
	[Required] Email Address	The email address of the contact per- son is used to send some notifications from the application.

- 3. Choose Save and Next.
- 4. You're navigated back to the homepage and can start using the application.

# 6.6 Activate User Account

To use SAP Digital Manufacturing, you need to activate your user account with the identity provider (IdP) as well as the SAP Digital Manufacturing application itself.

### **Prerequisites**

- Your IdP administrator has configured a user account for you in the IdP tenant.
- Your IdP administrator has configured the user application access in such a way that you can access the SAP Digital Manufacturing application.

# Context

If your administrator has configured SAP Cloud Identity Services - Identity Authentication as the identity provider, you receive an account activation email from SAP Cloud Identity Services - Identity Authentication when your user account is created in the tenant. If you don't receive the activation email or you can't find it (check in your spam or junk folders), contact your IdP administrator to send a password reset email, as follows:

- 1. Go to Users & Authorization > User Management >.
- 2. Select the user.
- 3. Under Authentication, choose Password Details, and then choose Send E-Mail.

### Procedure

- 1. If necessary, activate your user account with the identity provider.
- 2. Open the URL for SAP Digital Manufacturing.
- 3. Log on to the application.

#### O Note

If more than 1 identity provider is configured and active, **don't** enter your user name and password directly. Instead, choose the identity provider first and then enter your user name and password.

4. If the *Manufacturing Automation* group is available to your user account, open any app in this group and then close it.

# 7 Prepare for API Integration

Make the following preparations for making API calls on SAP Digital Manufacturing. This is required for thirdparty development as well as some system integration scenarios.

The following scenarios require you to prepare for integration following the steps below:

- Develop extensions based on APIs published by SAP Digital Manufacturing on the SAP Business Accelerator Hub
- Connect to SAP Digital Manufacturing from another system (e.g. SAP S/4HANA) for inbound calls
- Run cloud processes designed in the Production Process Designer
- Call SAP Digital Manufacturing services (for example, SFC Start service) in a cloud-based production processes



#### **Related Information**

SAP Digital Manufacturing APIs

# 7.1 Assign a Service Plan to a Subaccount

Assign a service plan for Digital Manufacturing Cloud Services to a subaccount. You can then create service instances under this service plan in the spaces in this subaccount.

### **Prerequisites**

The Digital Manufacturing Cloud Services entitlement has been allocated to your SAP Business Technology Platform global account.

### Context

### Procedure

- 1. Log on to the SAP BTP cockpit and select a region.
- 2. Select a global account.
- 3. Under Entitlements choose Entity Assignments.
- 4. Under Select Entities, select one or more subaccounts, and then choose Select.
- 5. Assign an appropriate service plan to each subaccount.
  - a. Choose Configure Entitlements Add Service Plans .
  - b. In the service catalog, search for Digital Manufacturing Cloud Services.
  - c. Select the appropriate service plan, corresponding to your license.
- 6. Choose Add 1 Service Plan.

# 7.2 Create an Organization

Create an organization in an SAP Business Technology Platform subaccount. This organization is automatically mapped to the subaccount.

# Context

An organization is required for creating spaces for development.

### Procedure

- 1. Go to your subaccount.
  - a. Log on to the SAP BTP cockpit and select a region.
  - b. Select a global account.
  - c. Select a subaccount.
- 2. Choose Enable Cloud Foundry.
- 3. In the Create Cloud Foundry Organization window, enter a name for the organization.
- 4. Choose Create.

# 7.3 Create a Space

Create spaces for different purposes in an SAP Business Technology Platform subaccount. For example, create one space for development and another for test, and allocate different quotas to different spaces.

Optionally, manage quota plans and restrict service quotas (and other quotas) to the space.

For detailed instructions on creating spaces, see Create Spaces.

# **Related Information**

Creating the Cloud Foundry Organization and Space

# 7.4 Create a Service Instance

Create an instance of SAP Digital Manufacturing Cloud Services under a particular service plan.

# Procedure

- 1. Go to your subaccount.
  - a. Log on to the SAP BTP cockpit and select a region.
  - b. Select a global account.
  - c. Select a subaccount.
- 2. Choose Service Service Marketplace and then select the Digital Manufacturing Cloud Services tile.
- 3. Choose Create.
- 4. Create a new instance.

- 5. Select the service SAP Digital Manufacturing Cloud Services.
- 6. Select the plan execution.
- 7. Select the runtime environment *Cloud Foundry*.
- 8. Select a space.
- 9. Enter a name for the instance.
- 10. Choose Create.

### **Related Information**

Use the command line to create a service instance

# 7.5 Create a Service Key

Create a service key for a service instance to generate credentials.

# Context

There are two ways to create a service key:

- Automatically create a service key by binding the service instance to an application
- Create a service key manually

#### ③ Note

If you create the service key manually, you need to bind the service instance to an application afterwards.

### Procedure

Create a service key manually:

- 1. Go to your subaccount.
  - a. Log on to the SAP BTP cockpit and select a region.
  - b. Select a global account.
  - c. Select a subaccount.
- 2. Select a space.
- 3. Choose Service Service Marketplace and then select the Digital Manufacturing Cloud Services tile.

- 4. Choose Instances.
- 5. Create a service key:
  - a. Select an instance.
  - b. Choose Service Keys.
  - c. Choose Create Service Key.
  - d. Enter a name for the service key and then choose Save.

### Results

When the service key is created, make a note of the following:

Parameter	Description
public-api-endpoint	The base URL for making calls on public APIs
clientid	A unique string representing the registration information provided by a client, the recipient of an access token
clientsecret	The secret passphrase configured for the client
url	Authorization server that authenticates the client and grants authorization
	The URL has this pattern: https:// {subdomain}.authentication.{regionHost}.
	The token service URL is the com- bination of this URL and /oauth/ token:https://{subdomain}.authentication. {regionHost}/oauth/token

### **Related Information**

Use the command line to create a service key

# 8 Create a Destination for System Communication and Integration

Create a destination to enable internal communication and integration with external systems.

# Context

The destination S4H\_INTEGRATION\_OAUTH is used by SAP Digital Manufacturing to provide authentication and authorization for internal system communication. You also require it to integrate with SAP ERP, SAP S/4HANA, and SAP S/4HANA Cloud.

#### ▲ Caution

You must create destination S4H\_INTEGRATION\_OAUTH so that your SAP Digital Manufacturing system functions correctly.

# Procedure

- 1. Go to the SAP Business Technology Platform subaccount of your SAP Digital Manufacturing tenant.
- 2. Choose Connectivity Destinations .
- 3. Choose Create Destination.
- 4. Enter the *Name* **s4H\_INTEGRATION\_OAUTH** and a description of the destination.
- 5. Select the *Type* **HTTP**.
- 6. In the URL field, enter the value of the public-api-endpoint.

You can find the value for the public-api-endpoint in the service key that you created when you prepared your tenant for API integration. For more information, see Prepare for API Integration.

Go to the space that you created in the SAP Business Technology Platform subaccount of your SAP Digital Manufacturing tenant.

In the sidebar menu of the space, choose *Instances*. Select the service instance to display its detail view. Under *Service Keys*, choose *Actions View* to display the details of the service key. The uaa tag of the service key also contains the <clientid>, <clientsecret>, and <url> that you need in steps 9 and 10.

- 7. Select the *Proxy Type* **Internet**.
- 8. Select the Authentication OAuth2ClientCredentials.
- 9. Enter the <clientid of the service key> in the *Client ID* and the <clientsecret of the service key> in the *Client Secret*.
- 10. Enter the <URL of the service key>/oauth/token in the Token Service URL.

11. Make sure that Use default JDK truststore is selected under Additional Properties.

12. Choose Save.

# Results

You've created the destination S4H\_INTEGRATION\_OAUTH.

# 9 Enabling Alert Services

Learn how to configure SAP Digital Manufacturing to use alerts in production process designs.

You can integrate the creation and update of alerts into your production processes using the Alert Service. To do this, you need to add the Alert Service as a web server in the *Manage Web Servers* app. Additionally, you must add the CreateAlert and UpdateAlert services in the *Manage Service Registry* app.

In order to set up this feature, follow the instructions in the **Enable Alert Services** guide attached to SAP Note 3342294

# **10 Setting Up Single Sign-On for the** *Manage Dashboards* **App**

Learn how to enable single sign-on (SSO) for the *Manage Dashboards* app by setting up trust between your identity provider and embedded SAP Analytics Cloud (SAC).

### Prerequisites

- For browser-specific settings and troubleshooting, see SAP note 3292945 k/z.
- You use SAP Cloud Identity Services Identity Authentication as identity provider (IDP), which is recommended. You're the tenant administrator and have been assigned the appropriate roles. You've performed the following steps:
  - You've created two user groups that you want to use for establishing trust under Users & Authorizations User Groups, for example IDP\_DMCI\_SAC\_USER and IDP\_DMCI\_SAC\_ADMIN.
  - You've assigned users to these user groups. For more information, see Manage Users and Authorization [page 120].
- You've got the administrator role in your SAP Business Technology Platform subaccount.
- In your SAP Digital Manufacturing for insights subaccount in SAP BTP cockpit, you've created the following role collections and mapped them to the corresponding IDP user groups:
  - DMCI\_SAC\_USER\_Collection (You can choose a random name for this collection.)

Role Name	Role Template
DMCI_SAC_USER	DMCI_SAC_USER

You need this role to access the Manage Dashboards app.

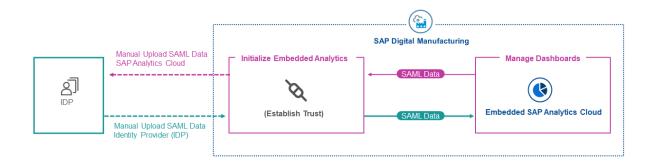
• DMCI\_SAC\_ADMIN\_Collection (You can choose a random name for this collection.)

Role Name	Role Template
DMCI_SAC_ADMIN	DMCI_SAC_ADMIN

You need this role to access the *Initialize Embedded Analytics* app. For more information, see Configure Authorization by Creating Role Collections [page 13].

• Under *Role Collections*, you've mapped the DMCI\_SAC\_USER\_Collection to the IDP\_DMCI\_SAC\_USER user group and the DMCI\_SAC\_ADMIN\_Collection to the IDP\_DMCI\_SAC\_ADMIN user group. For more information, see Manage Users and Authorization [page 120].

### Context



SAP Digital Manufacturing for insights uses features provided by embedded SAP Analytics Cloud. These features are provided in the *Manage Dashboards* app. To enable a single sign-on (SSO) for the app when accessing embedded SAP Analytics Cloud, you must establish trust between the identity provider (IDP) you use for SAP Digital Manufacturing and embedded SAP Analytics Cloud. To establish trust, you need to exchange SAML authentication metadata between embedded SAP Analytics Cloud and your identity provider (IDP). In the following procedure, this IDP is the Identity Authentication service provided by SAP Business Technology Platform. In this process of establishing trust, the *Initialize Embedded Analytics* app acts as an intermediary between your IDP and embedded SAP Analytics Cloud.

#### O Note

• SAP ID Service or the default IDP is not supported for the usage of embedded SAP Analytics Cloud with SAP Digital Manufacturing. We recommend setting up single-sign-on as described in this topic.

# Procedure

1. In the *Initialize Embedded Analytics* app, choose *Download SAML Metadata* to download the SAML metadata of embedded SAP Analytics Cloud.

A SAML metadata XML file is downloaded to your computer.

- In your SAP Cloud Identity Services Identity Authentication (IDP) tenant, go to Application & Resources
   Applications .
- 3. Create a new application.
  - a. Enter a name of your choice.
  - b. Choose SAP BTP Solution as Type, and Parent application as None. Leave Home URL empty.
- 4. Choose the new application.
- 5. On the *Trust* tab, choose *SAML 2.0 Configuration*.
- 6. Under *Define from Metadata*, upload the SAML metadata XLM file that you downloaded from the *Initialize Embedded Analytics* app.

The configuration parameters of your application are updated.

- 7. Save.
- 8. Choose Subject Name Identifier.
- 9. Under *Basic Configuration*, select *Email* as basic attribute.
- 10. Save.
- 11. Choose Default Name ID Format.
- 12. Select Email.
- 13. Save.
- 14. Choose Attributes.
- 15. Choose *Add* to add the attribute *Groups*.
- 16. In the *Groups* row, enter **sac** as *Expression*.

For more information on the attributes, see Enabling a Custom SAML Identity Provider.

- 17. In the *Email* row, enter **email** as *Identity Directory*.
- 18. Save.
- 19. On the main menu, choose *Tenant Settings*.
- 20. Choose SAML 2.0 Configuration.
- 21. Choose Download Metadata File.

A SAML metadata XML file is downloaded to your computer.

22. Open the Initialize Embedded Analytics app.

23. Under Configuration, choose Browse and select the SAML metadata file downloaded from your IDP.

- 24. Save.
- 25. Refresh to see the *Identity Provider Status* change from *Configuration In Progress* to *Configured*. This takes a few minutes.

# Results

You've established trust between the systems and can access embedded SAP Analytics Cloud (SAC) without a separate user login.

As a check, go to the *Manage Dashboards* app and choose *Create* to access embedded SAP Analytics Cloud (SAC) directly using single sign-on (SSO).

# 11 Manage Members in an SAP Business Technology Platform Account

You can manage members on different levels: global account, subaccount, organization, and space.

#### (i) Note

These instructions are applicable only to the Cloud Foundry environment.

A member must be a user managed by the trusted identity provider. The SAP ID service is the default identity provider; as long as it's not set to inactive, you can add S-users as members at various levels.

To configure destinations in a subaccount, you must be a subaccount member.

To configure integrations with other systems in a space, you must be a space member with the Space Developer role.

To perform development-related tasks in a space, you must be a space member with the Space Developer role.

# **Related Information**

Managing Members Roles and Permissions

# 12 Add an Identity Authentication Tenant Administrator

As an administrator for an SAP Cloud Identity Services - Identity Authentication tenant, you can add more administrators in the administration console.

#### Prerequisites

You're assigned the Manage Tenant Configuration role.

### Procedure

- 1. Log on to the administration console for the tenant.
- 2. From the side bar menu, choose Users & Authorizations Administrators ].
- 3. In the administrator list, choose + (*Add*) and then choose User.
- 4. Enter the email, first name, and last name for the user that you want to add as an administrator.

If a user with the email already exists in the system, the *First Name* and *Last Name* fields are automatically filled.

- 5. Assign the appropriate roles to the new administrator.
- 6. Save your entries.

### **Related Information**

SAP Cloud Identity Services - Identity Authentication Documentation

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# **13 Monitor Your Solution**

Learn how you can monitor the health of your integration scenarios.

As an administrator you can use the *Integration & Exception Monitoring* feature of SAP Cloud ALM, which isn't part of SAP Digital Manufacturing, to monitor your end-to-end integration scenarios centrally.

- Access detailed information about the status of your integration messages in different systems across your integration scenario
- Monitor exceptions related to your integration scenario
- Alert responsible persons when problems occur
- Search and track integration messages based on business contexts, e.g. order numbers
- Trigger operation flows to automatically correct problems

For more information on *Integration & Exception Monitoring* with SAP Cloud ALM, refer to <u>Integration & Exception Monitoring</u>.

For detailed information on setting up and configuring SAP Cloud ALM for use with SAP Digital Manufacturing, refer to Integration & Exception Monitoring - Setup & Configuration //

### **Related Information**

Monitor Your Integration Scenario

# 14 Manage Subscriptions for Cloud System Notifications

Use the *Cloud System Notification Subscriptions* app to add, customize, and manage subscriptions to Cloud Availability Center notifications.

You can use the app to remain informed and receive timely updates regarding SAP Cloud Services, including planned and unplanned downtimes, and other important communication.

For more information on using the Cloud System Notification Subscriptions app, see the User Guiden-

#### (i) Note

You can't subscribe to notifications for SAP Digital Manufacturing in the *Cloud System Notification Subscriptions* app. As a customer and partner using SAP Digital Manufacturing you automatically receive relevant notifications. Use the app to manage notifications for underlying services and applications such as the SAP Business Technology Platform, that are used by SAP Digital Manufacturing.

# 15 Decommissioning Tenants, Data Return, and Deletion

If you decommission one or several tenants, SAP deletes your data once the contract period ends. You can request the return of this data before it's deleted by SAP.

You trigger the decommissioning of a system/tenant using a request for termination, for instance, when you cancel a contract or when a contract expires. The termination starts with a notification period: As a customer, you receive a notification to inform you that your contract is going to be terminated and that you can request the return of your data using a service ticket. You can request the data return at any point in time until the termination date.

After the termination date, SAP triggers the decommissioning process of the system/tenant. Your customer accounts are deactivated and your data is deleted by technical means according to local legal requirements.

To decommission your tenants and request the return of your data, follow this procedure:

- 1. To create a decommissioning request, raise an incident through SAP Support Portal.
- 2. In this request, state the Tenant ID, Termination Date, and whether you request Data Return.
- 3. Include the following information:
  - Support Component: Onboarding & Operations Issue: MFG-DM-OPS
  - Short Text: DMC Data Replication: Data return request as part of the decommissioning request
  - Priority: Medium

You receive further information on how to recover your data from your DevOps team.

#### O Note

You must collect your data before the final termination date. SAP deletes all customer data at the end of the termination period.

# 16 How to Contact Us

Contact us if you encounter any issues that you can't resolve by yourself or if you want to provide feedback.

### Context

If you encounter technical issues, contact us by reporting an incident on the SAP Support Portal. These issues include unexpected downtime, denied access, missing authorizations, and so on.

Before reporting an incident or contacting support, make sure that you refer to SAP note 3323881/2/ for information on creating incidents and troubleshooting.

#### Note

To report an incident, you must have an S-user account.

Application Component	Description
MFG-DM	Digital Manufacturing
MFG-DM-ME	Manufacturing Execution
	Alert Service
MFG-DM-ME-MD	Master Data
MFG-DM-ME-PRD	Production Activities
MFG-DM-ME-INT	Manufacturing Integration
MFG-DM-ME-OEE	Manufacturing Execution - OEE
MFG-DM-MI	Manufacturing Insights
MFG-DM-MI-RPT	Analytical Reporting
MFG-DM-MI-LM	Line Monitor
MFG-DM-MI-DR	Data Replication
MFG-DM-MI-PQM	Predictive Quality Management
MFG-DM-MI-OEE	Overall Equipment Effectiveness
MFG-DM-EDGE	Digital Manufacturing for edge computing
MFG-DM-REO	Resource Orchestration
MFG-DM-MA	Manufacturing Automation
MFG-DM-MA-PCM	Production Connectivity Model
MFG-DM-MA-PP	Production Process
MFG-DM-EXT	Manufacturing Extensibility

Application Component	Description
MFG-DM-CFG	Manufacturing Configurations
MFG-DM-OPS	Onboarding & Operations
MFG-DM-FND-MAM	Digital Manufacturing Asset Model

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