SIEMENS

Opcenter Intelligence 2401.0001

Release Notes

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Guidelines

This manual contains notes of varying importance that should be read with care; i.e.:

Important:

Highlights key information on handling the product, the product itself or to a particular part of the documentation.

Note: Provides supplementary information regarding handling the product, the product itself or a specific part of the documentation.

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We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency. However, the information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.

Security information

Siemens provides products and solutions with industrial security functions that support the secure operation of plants, systems, machines and networks.

In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement - and continuously maintain - a holistic, state-of-the-art industrial security concept. Siemens' products and solutions constitute one element of such a concept.

Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place.

For additional information on industrial security measures that may be implemented, please visit https://www.siemens.com/industrialsecurity.

Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats.

To stay informed about product updates, subscribe to the Siemens Industrial Security RSS Feed under https://www.siemens.com/cert.

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1 General Notes

Opcenter Intelligence functionalities - Scope

Siemens AG supports solely Opcenter Intelligence features that are officially documented.
Any improper use of Opcenter Intelligence not expressly described in official documentation will not be supported.

Any hardware or software configuration not expressly mentioned in the documentation is unsupported. For further information, it is recommended that you open an Incident Request to Siemens DI SW Support Services.
As a result, users must not manually launch any executables installed by Opcenter Intelligence unless explicitly instructed to do so by the Siemens DI SW Support Services or official Opcenter Intelligence documentation.
Likewise, users must not use any APIs exposed by DLLs installed by Opcenter Intelligence within custom applications, unless explicitly instructed to do so by Siemens DI SW Support Services or official Opcenter Intelligence documentation.

Integration of Third-Party software

Integration of third-party software with Opcenter Intelligence does not imply that the product supports all the functionalities provided by the former. Likewise, it does not imply that those third-party software functionalities that are supported are feasible in all possible configurations. Only those functionalities and configurations presented and described in Opcenter Intelligence documentation are officially supported in conjunction with Opcenter Intelligence.

Location of Opcenter Intelligence Configuration and Log Files

At the following paths you can find the folders where Opcenter Intelligence configuration files and logs are stored:

Opcenter Intelligence Configurator Log File

File Name: Siemens.SimaticIT.MIStudio20.PostSetup.log

Path: C:\ProgramData\Siemens\Opcenter\Intelligence\IN\LogFiles\SetUp\

Alternatively, if logs are not present in the default location, you can find them in C:\Users\<username>\AppData\Local\Temp\

Opcenter Intelligence Configurator XML Files

File Name	Path
SetupParameters.xml	C:\ProgramData\Siemens\Opcenter\Intelligence\IN\Setup\
OpcenterAnalyticsParameters.xml	C:\ProgramData\Siemens\Opcenter\Intelligence\IN\Setup\

Opcenter Intelligence Core Log File

File Name: Siemens.SimaticIT.UAMI.MIStudio20.ServiceHost.log

Path: C:\ProgramData\Siemens\Opcenter\Intelligence\IN\LogFiles\CoreService\

Apache Log4j2 vulnerability (Log4shell) - Tableau Server

Some versions of Tableau Server have been affected by the vulnerabilities recently disclosed in products that use the Log4j Apache library. For this reason, the upgrade to the newly released Opcenter Intelligence version, which includes an upgrade to Tableau Server latest version, is mandatory. If you cannot perform this upgrade, at the

following link you can find detailed instructions on how to mitigate this issue: https://kb.tableau.com/articles/issue/apache-log4j2-vulnerability-log4shell-tableau-server-mitigation-steps

Data Protection by Design Aspects of DI SW MOM Products and Solutions

In the course of development of DI SW MOM Products and Solutions, DI SW MOM follows the “Data protection by design” as foreseen in Article 25 of the General Data Protection Regulation (GDPR). This means that data protection and privacy issues are taken into account starting from the commencement of product development or solution engineering.

In general, within Siemens, the following processes are implemented:

- Data Protection by Design approach is a part of the principles actively adopted by Siemens and integrated in the secure lifecycle development of products.
- Siemens solutions adopt Threat and Risk Analysis (TRA), a Siemens-wide standardized methodology that is used for product, solution and service business during product development, engineering or service projects. This methodology is intended to support Siemens teams in identifying typical security weaknesses and vulnerabilities, analyzing any threats that might exploit these weaknesses or vulnerabilities and evaluating any resulting risks.

Specifically for DI SW MOM products and solutions, in all data collection and processing activities that potentially involve personal data in the intended customer use case, DI SW MOM considers appropriate technical and/or organizational measures, with the goal of adequately addressing the data protection principles and safeguarding individual rights.

For Opcenter Intelligence the following applies:

- Opcenter Intelligence has obtained the TÜV SÜD certification of security in the development process (based on IEC 62443-4-1). This standard specifies process requirements for the secure lifecycle development of products used in an Industrial Automation and Control System (IACS). The lifecycle includes:
    - The definition of security requirements
    - Secure design
    - Secure implementation (including coding guidelines), verification and validation
    - Secure defect management, patch management, and product end-of-life
- The following personal data is processed by the Opcenter Intelligence solution:
    - user id
    - user name
    - full name
    - email address

The following data can also be potentially processed depending on the data source:

- Labor (identification of a user) - for the Opcenter EX PH, Opcenter EX DS, Opcenter EX CR, Opcenter Q data sources
- LaborName (Name of labor may be in comments)
- LaborClass (registry of possible categories to which a Labor can belong, e.g. line operator, manager, etc.) - for the Opcenter EX PH data source
- LaborLaborClass (table of relationship between Labor and its possible 1-n classes)
- LaborProperty (registry of possible properties)
- LaborPropertyStaticValue (value properties)
- LaborHierarchy (if there is the need to trace a team)
- LaborTimeModel (possible specific labor time model) - for the Opcenter EX DS data source
- LaborTimeCategory (registry of time category) - for the Opcenter EX DS data source

Specific attention is dedicated to the processing of personal data belonging to special categories, relevant for the purpose of detecting the racial or ethnic origin, political opinions, religious or philosophical beliefs, trade union

membership, genetic data, health, sexual orientation or conduct, criminal convictions and offenses or related security measures of the persons concerned. No such personal data is processed by Opcenter Intelligence.

- The personal data processed by Opcenter Intelligence is required for Log-In, Electronic Signature, reporting functions and notification systems. Therefore, such personal data processed by Opcenter Intelligence cannot be anonymized or pseudonymized. Such data is stored solely for these reasons, as it is necessary to identification of the operating personnel, notification by email.
- Opcenter Intelligence adopts hashing and encrypting (at rest and in transit).
- In Opcenter Intelligence personal data can be deleted when no longer necessary for the designated purpose. All data related to the Manufacturing Data Warehouse can be deleted by the customer by means of the un-deploy operation. On the other hand, personal data may appear in the solution's data repositories as database's records, product file and log files, which are necessary for diagnostic or logging purposes. This information generated by Opcenter Intelligence is manually deleted as per the designated guidelines.
- Opcenter Intelligence Solution makes use of least privilege access control and policies and using appropriate roles and authorization concepts as individual user Read/Write permission.
- Regular review is performed to validate necessity for the purposes for which the personal data was collected and test the design against purpose limitation.

2 Main Functionalities

The following pages describe the main functionalities for:

- Opcenter Intelligence
- Opcenter Reporting

2.1 Opcenter Intelligence Main Functionalities

What is Manufacturing Intelligence?

Manufacturing Intelligence is a definition that applies to software used to integrate a company's manufacturing-related data from many sources for the purposes of reporting, analysis and visual summaries. The primary goal is to turn large amounts of manufacturing data into real knowledge and to consequently drive the business results.

Opcenter Intelligence supplies all the functionalities required to develop, deploy and maintain a solution in order to analyze manufacturing data according to standard and custom analytical contexts.

Main Features

Opcenter Intelligence provides you with the following basic functionalities:

- A Manufacturing Analytical Model (MAM) based on ISA-95 international standard for entity definition.
- All the features required to extend and customize models and metrics.
- A smart support for semantic data mapping between the sources and the MAM.
- An application designed to manage and maintain an Opcenter Intelligence Solution.
- A presentation/collaboration layer where you can perform and share data analysis.

What is a Solution?

A solution is a container of objects that allows you to obtain and import data for immediate use or storage in one or more data warehouses. It can be composed of:

- Projects
- Scenarios
- Flows
- Environments
- Time Definitions
- Smart Views

What is a Project?

A project is a set of different configurations that can address information ingestion (based on complex data transformation) in a data warehouse. A project is composed of the following items:

- A set of project functionalities
- One or more sites
- A number of project sources
- One or more timeline schedules

What is a Scenario?

A scenario is the model of hardware and software resources for the project. This model is the abstract representation of the distribution of servers, services, databases and flows in a network.

What is a Flow?

A flow allows you to load data from a source database to a data warehouse. After you have populated an empty database (initial load), it is necessary to schedule a periodic run of ETL incremental loads to keep the data warehouse aligned with the sources.

What is an Environment?

An environment represents the physical implementation of a scenario. While configuring an environment, all items included in the scenario are mapped on real items that exist in a physical environment.

What is a Smart View?

A smart view is a part or a projection of the data warehouse content specified to facilitate a particular purpose or user activity. It is, basically, a partial and/or redefined visualization of the logical schema of the data warehouse.

What is a Deploy?

The deploy of a solution or of a smart view is a set of operations performed to make operational all the items included in the project, according to the details defined during the creation of the environment or of the smart view.

2.2 Opcenter Reporting Main Functionalities

Opcenter Reporting allows end-users to create operational reports by connecting to the defined data sources.

Opcenter Reporting is integrated in the Opcenter Reporting solution package and is the most cost-effective visualization tool supported by Opcenter Reporting in order to easily benefit from the built-in reports provided by Siemens MOM products, like for example Opcenter Execution Core, Opcenter Execution Discrete or Opcenter Execution Process, for which out-of-the-box reports designed using Opcenter Reporting are available and where Opcenter Reporting can be embedded.

The following functionalities are available:

- Define multiple data source connections to Siemens MOM products. Both SQL Server and Oracle server types are supported. Opcenter Reporting can only be connected to the databases of Siemens MOM products. The connection to third-party databases is not allowed.
- Design reports structure and choose how to show the information that originates either from a database or another data source by using Combit® List & Label Designer, which is integrated into the application. In the Designer you can add simple tables, comprehensive master-detail reports/subreports, crosstabs, charts, RTF text, barcodes, graphics, PDF objects, user defined objects etc. You can also employ a wide variety of charts, gauges and shapefiles to enhance your reports with professional-quality visuals and drill down the hierarchy from summary information to more detailed data.
- Organize reports within folders.
- Clone reports.
- Export and import reports.
- Define custom entities to expose new data sets in the Designer so that when you create a report the custom entities you have created will be included in the list of available tables and views.

> Opcenter Reporting is designed to only create and manage reports. Even though Combit List & Label® Designer includes the labeling functionality, Opcenter Reporting does not support it.

3 What's New

The following pages describe the main new functionalities for:

- Opcenter Intelligence
- Opcenter Reporting

3.1 Opcenter Intelligence What's New

The following functionalities have been released in the current version:

Data Sources

Opcenter Intelligence has been tested with the following new data sources:

- Opcenter Execution Core 2404 as SQL Server and Oracle data source
- Opcenter Execution Electronics 2404 as SQL Server data source
- Opcenter Execution Pharma 2211 or higher as Oracle data source
- Opcenter Intra Plant Logistics 2404 as SQL Server data source

Manufacturing Data Warehouse Data Model Extension

The Manufacturing Data Warehouse SQL Server data model for Opcenter Execution Electronics has been extended to correctly calculate DPMO (Defects Per Million Opportunities) KPIs in quality dashboards for the Electronics Industry. The relationship between the **Bill of Material** entity and the **Material Definition** entity has been changed to support a 1-to-N relationship. To this end, the **MaterialDefinitionBillOfMaterial** entity has been added to the **Material Model**. The **MaterialModel.pdf** MDW schema has been updated accordingly.

Data Mapping File Names' Simplification

The names of PDF mapping files for Opcenter Intelligence data sources have been shortened and simplified to the format: **OpcenterIN_<product name>_<oldest supported version>_orHigher_Mapping** (for example: **OpcenterIN_EXPR_v4.0orHigher_Mapping.pdf**).

MDW Data Model Documentation

The following mapping files have been updated:

Data Source	Mapping File
Opcenter EX EL	OpcenterIN_EXEL_v8.9orHigher_SQL_Server_Mapping.pdf
Opcenter EX PR	OpcenterIN_EXPR_v4.0orHigher_Mapping.pdf
Opcenter EX PH	OpcenterIN_EXPH_v2211OrHigher_Mapping.pdf
Opcenter IPL	OpcenterIN_IPL_v2210orHigher_Mapping.pdf

3.2 Opcenter Reporting What's New

No new functionalities have been released in the current version.

4 Documentation

Accessing the Documentation

English documentation files can be found in the following folders:

Product	Folder
Opcenter Intelligence	<*setup drive*>Program Files\Siemens\Opcenter\Intelligence\IN\Documentation
Opcenter Reporting	<*setup drive*>Program Files\Siemens\Opcenter\Intelligence\Report\Documentation
User Management Component	<*setup drive*>Program Files\Siemens\UserManagement\Documentation

The documentation is available on **Support Center** at the link: https://support.sw.siemens.com/en-US/

Opcenter Intelligence Documentation

The following manuals are available for Opcenter Intelligence in PDF format:

Document	Description
Opcenter Intelligence Quick Start Installation Manual	Explains the procedures that must be performed to install and configure the product. This manual is available when you install Opcenter Intelligence Analytics (Tableau® OEM) during Opcenter Intelligence setup. This manual also provides a set of concepts, best practices and practical configuration settings to address the principal security risks and threats that may affect a manufacturing intelligence solution.
Opcenter Intelligence Enterprise or Site Installation Manual	Explains the procedures that must be performed to install and configure the product. This manual is available if you are using the Opcenter Intelligence - Site or Opcenter Intelligence - Enterprise license. This manual also provides a set of concepts, best practices and practical configuration settings to address the principal security risks and threats that may affect a manufacturing intelligence solution.
Opcenter Intelligence User Manual	Illustrates the procedures that must be performed to use the product, from both Engineering and Runtime standpoints.

Document	Description
Opcenter Intelligence Reference Manual	Shows the possible associations between functionalities and models according to which the data warehouse is configured and mapped for the different data sources.
Opcenter Execution Electronics Integration User Guide	Contains information required before Opcenter Intelligence configuration in order to be able to load and analyze correct data from the Opcenter EX EL source.

Opcenter Reporting Documentation

The following manuals are available for Opcenter Reporting in PDF format:

Document	Description
Opcenter Reporting Installation Manual	Explains the procedures that must be performed to install the product.
Opcenter Reporting User Manual	Illustrates the procedures that must be performed to use Opcenter Reporting.
Designer Manual	The user manual that illustrates the procedures to be performed to use Combit® List & Label Designer. This manual is also available at the link: https://docu.combit.net/designer/en/#!Documents/introduction.htm

Common Documentation

The following common manuals are available in PDF format for Opcenter Intelligence and Opcenter Reporting:

Document	Description
Product Overview	Provides a general description of the various available functionalities. The basic concepts that form the groundwork for using the product are discussed.
Release Notes	Describes the implemented main functionalities, some general notes, functional limitations, fixed and known technical issues.

Manufacturing Data Warehouse Documentation

The following additional documents are available:

Documents	Format	Where you can find them
Entity Mapping files	PDF	• The mapping files are included in the **OpcenterINMappingFiles.zip** file available on Support Center (https://support.sw.siemens.com/en-US/) > **Opcenter Intelligence** card > **Documentation** tab. • ***<setup drive>*Program Files\Siemens\Opcenter\Intelligence\IN\Documentation\MappingFiles** folder. To install the mapping files folder, you must select the **Opcenter Intelligence V.x.x Cloud Documentation** check box during the product setup.
MDW Model schemas	PDF	The schemas are included in the **MDWSchemas.zip** file available on Support Center (https://support.sw.siemens.com/en-US/) > **Opcenter Intelligence** card > **Documentation** tab.
List of MDW entities/attributes (*for previous versions of data sources*)	Excel	To be requested from Siemens DI SW Support Services.

Entity Mapping Files

The mapping files are available for the following data sources:

- Opcenter Execution Discrete 3.x (SQL Server)
- Opcenter Execution Discrete 4.0 (SQL Server)
- Opcenter Execution Discrete 4.1-4.2-4.3 (SQL Server)
- Opcenter Execution Discrete 4.4 or higher (SQL Server)
- Opcenter Execution Process 3.x
- Opcenter Execution Process 4.0 or higher
- Opcenter Execution Core 8.7 or higher (SQL Server)
- Opcenter Execution Electronics 8.9 or higher (SQL Server)
- Opcenter Intra Plant Logistics 2210 or higher (SQL Server)
- Opcenter Execution Pharma 2211 or higher (Oracle)
- SIMATIC IT Line Monitoring System 2.3-2.4-2.5-2.6-2.7
- SIMATIC IT Historian 7.2

In these files the yellow columns include an example of the name of the source database and its physical tables, the green columns include the entities and attributes of the manufacturing data warehouse and the light blue columns include the corresponding source entities and UI items as well as related mapping information.

For more details on the supported versions for each data source, see Data Sources Compatibility.

Documentation Languages

- Opcenter Intelligence documentation is available in English and Simplified Chinese.

  To access Chinese documentation on Support Center, change the Support Center language to Chinese (中国人) and browse to the Opcenter Intelligence Documentation section.

- Opcenter Reporting Installation Manual, Opcenter Reporting User Manual and Combit® List & Label Designer Manual are available in English.

No Longer Released Documentation

Opcenter Intelligence Release Notes in HTML format (**OpcenterIN_ReadMe.html**) are no longer released.

5 Data Sources Compatibility

Opcenter Intelligence supports the following data sources:

Product Family	Product	Product Versions
Opcenter EX	Opcenter Execution Core as SQL Server data source	• 8.0 - 8.1 - 8.2 - 8.3 - 8.4 - 8.5 - 8.6 • 8.7 -8.8 - 8.9 - 2210 - 2304 - 2310 (including updates) - 2404
	Opcenter Execution Core as Oracle data source	• 8.0 - 8.1 - 8.2 - 8.3 - 8.4 - 8.5 - 8.6 • 8.7 - 8.8 - 8.9 - 2210 - 2304 - 2310 (including updates) - 2404
	Opcenter Execution Discrete as SQL Server data source	• 3.0 • 3.1 - 3.2 - 3.3 • 4.0 • 4.1 - 4.2 - 4.3 • 4.4 - 2207 - 2207.0001 - 2301 - 2301.0001 - 2307 - 2307.0001 - 2401 or higher
	Opcenter Execution Electronics as SQL Server data source	8.9 - 2210 - 2304 - 2310 (including updates) - 2404
	Opcenter Execution Process	• 3.0 - 3.1 - 3.2 - 3.3 • 4.0 - 4.1 - 4.2 - 4.3 - 4.4 - 2207 - 2207.0001 - 2301 - 2301.0001 - 2307 - 2307.0001 - 2401 or higher
	Opcenter Execution Foundation OEE	2207 - 2207.0001 - 2301 - 2301.0001 - 2307 - 2307.0001 - 2401 or higher
	Opcenter Execution Pharma as Oracle data source	2211 or higher
Opcenter QL	Opcenter Quality as SQL Server data source	• 11.0 to 11.3 • 12.0
	Opcenter Quality as Oracle data source	• 11.0 to 11.3 • 12.0
Opcenter IPL	Opcenter Intra Plant Logistics as SQL Server data source	2210 - 2304 - 2310 (including updates) - 2404
Opcenter IN	Intelligence Analytical Model	2.x - 3.x (MDW 2.0)

Product Family	Product	Product Versions
SIMATIC IT UA	Unified Architecture Discrete Manufacturing	• 1.0 - 1.1 - 1.2 - 1.3 • 2.3 - 2.4 - 2.5
	Unified Architecture Process Industries	• 1.1 Update 1 - 1.2 • 2.3 • 2.4 - 2.5
CEP	Camstar Enterprise Platform as SQL Server data source	V7 SU4 - SU5 - SU6 - SU7 - SU8
	Camstar Enterprise Platform as Oracle data source	V7 SU4 - SU5 - SU6 - SU7 - SU8
QMS	QMS Professional as SQL Server data source	10.03 - 10.04 - 10.05 - 10.06 - 10.07
	QMS Professional as Oracle data source	10.03 - 10.04 - 10.05 - 10.06 - 10.07
SIMATIC IT	Production Suite (PRS)	7.0 SPx - 7.1 - 7.2 - 8.0
	Historian (HST)	7.2
	Line Monitoring System (LMS)	• 2.2 SP1 HF1 • 2.3 - 2.4 - 2.5 - 2.6 - 2.7
	Reporting Framework (RF)	MDW 1.0
	Electronic Batch Recording (eBR) as Oracle data source	6.1.6
Third-Party Systems	SQL Server	2012 or higher
	Oracle	12c or higher

6 Obsolete Functionalities

This chapter lists the functionalities and artifacts that were deprecated in previous product versions and are no longer supported.

Windows Authentication

Starting from Opcenter Intelligence 3.3 the default identity provider is the User Management Component (UMC). Starting from version 3.5 Windows Authentication is no longer supported.

If you are upgrading from a previous version of Opcenter Intelligence, you have to migrate to UMC as Identity Provider.

To migrate to the new mode, you have to apply specific settings in Opcenter Intelligence Configurator and a manual operation to add the Windows Administrator user to UMC. For more details, see *Opcenter Intelligence Quick Start Installation Manual* or *Enterprise or Site Installation Manual* depending on the license you have purchased.

Legacy Tableau® and Microsoft Power BI Integration

Starting from version 3.5 the integration with the following functionalities is no longer supported. For each of them an alternative functionality is suggested.

Obsolete Functionality	Alternative Functionality
Accessing a Dashboard built with a Legacy Tableau® version directly from Opcenter Intelligence Web Portal.	Opcenter Intelligence Analytics, the embedded third-party component that you can install during Opcenter Intelligence setup. Dashboards can also be embedded into another hosting application.
Accessing a Dashboard built with Power BI directly from Opcenter Intelligence Web Portal.	Dashboards can still be accessed from the same Power BI environment used to create dashboards, or dashboards that are embedded into another hosting application.

Microsoft SQL Server Reporting Services Integration

Starting from version 3.5 the integration with the following functionality is no longer supported. An alternative functionality is suggested.

Obsolete Functionality	Alternative Functionality
Accessing a Paginated Report built with Microsoft SQL Server Reporting Services directly from the Opcenter Intelligence Web Portal.	Opcenter Reporting, which is integrated in the Opcenter Intelligence solution package. Reports can also be accessed from outside Opcenter Intelligence (directly or embedded into another hosting application).

Operating Systems

Starting from version 2401, Windows Server 2012 R2 x64 is no longer supported.

7 Functional Limitations

The following pages describe the functional limitations for:

- Opcenter Intelligence
- Opcenter Reporting

7.1 Opcenter Intelligence Functional Limitations

Opcenter Intelligence Analytics (Tableau® OEM) Installation Requires Support

When you are installing Opcenter Intelligence Analytics (Tableau® OEM) please contact the Support Team.

Mandatory column types cannot be used to modify entity extensions

In the analytical solution project, if you modify an entity extension that was already deployed and on which data was stored, you cannot use mandatory column types such as **Name**, otherwise the next deployment will fail because the system will not automatically add a value for that column. The recommended alternative is to use the **TextAttribute** or **Note** column types.

Opcenter Execution Electronics data source: discrepancy between versions 8.9 and 2210

Opcenter Intelligence supports versions 8.9-2210 (including updates) for the Opcenter Execution Electronics (SQL Server) data source, as shown on the data sources pie menu. However, the 8.9 version database does not contain the **isQty** and **ChildCount** fields that were added to version 2210. Therefore, if you are using version 8.9, the deploy of the environment is bound to fail.

As a workaround, you can customize the script of the **SummaryTableOEERawDetails** entity in the **Operational Performance and Quality** model by casting the two missing fields to NULL as in the following example. For more details on scripts, see also the *Loading a Script* chapter in *Opcenter Intelligence User Manual*.

Example

Customize the script by replacing:

```
CAST(ChildCount as float) AS ChildCount,
CAST(isQty as float) AS Qty,
```

with:

```
CAST(0 as float) AS ChildCount,
CAST(0 as float) AS Qty,
```

Disabling Anti-Virus Recommended before Tableau Server Installation

Tableau Server installation may fail on a machine where an anti-virus software is installed. It is therefore recommended you disable the anti-virus before you start installing Tableau. For more details, see https://kb.tableau.com/articles/issue/error-tableau-server-initialization-failed-during-installation-with-anti-virus?_ga=2.43810533.1336776877.1668404981-1736113883.1668148487

Stop and Start Service before Installing Opcenter Intelligence over Previous Version

Before launching the installation of Opcenter Intelligence over the previous version, you must manually stop the **Siemens.SimaticIT.UAMI.MIStudio20.ServiceHost** service and restart it after the installation is completed and before running Opcenter Intelligence Configurator.

Supported Special Characters in Domain User field in Opcenter Intelligence Configurator

In Opcenter Intelligence Configurator, **Opcenter Intelligence Core** section, in the **Domain User** field, the following special characters are not supported: " / [ ] : ; | = , + * ? < > @ and space.

Loading Opcenter Intelligence Analytics (Tableau® OEM) Dashboards in Google Chrome is not possible if protocol is HTTP

In a scenario where Opcenter Intelligence and Opcenter Intelligence Analytics are exposed with two different domains, the Google Chrome browser cannot be used to load Opcenter Intelligence Analytics Dashboards if the configured protocol is HTTP. To overcome this issue, you can either use the Mozilla Firefox browser or change the protocol configuration to HTTPS.

Recommendation on User Management Component (UMC) Installation

For security reasons, it is strongly recommended that you install UMC under the path **C:\automation\Siemens\UserManagement** and verify that file system access permissions for drive C:\ have not been modified.

Microsoft SQL Server 2019 Cumulative Update 9 or higher is recommended

If you are using Microsoft SQL Server 2019 versions previous to Cumulative Update 9, random issues may occur during flow execution. The installation of the latest SQL Server version is therefore recommended.

Assigning roles to user groups is no longer supported

Assigning roles to user groups is not supported anymore, as the new licensing model introduced starting from version 3.2 requires to verify the number of configured users against the number of users allowed by the installed licenses.

Run the setup as Administrator

The setup file **Start.exe** located in the ISO root folder must be executed as administrator (right-click the file and select **Run as administrator**).

Smart View Deploy fails if Measure/Attribute names differ by a space

In a smart view, if different measures/attributes have names that differ from each other only by a space, the deploy of the smart view fails because their names must be unique within a query batch or stored procedure.

Example:
Actual Quantity EquipmentPropertyStaticValue
ActualQuantity EquipmentPropertyStaticValue
As a workaround, you can rename the measures or attributes by editing them in the smart view page.

Tracking of discarded records

If a record is discarded due to business logic, it is converted into xml format and included in the failed table to be analyzed in detail at a later moment. However, some characters are not compatible with xml. They will not

therefore be included in the xml and consequently in the failed table. The system will work normally but these records will not be tracked.

Maximum number of columns for a single card in a Smart View

The maximum number of columns of a single card in a Smart View can be obtained by executing the following calculations:

- For the cards in the **Measures** section: *number of selected contexts x 2 + number of selected measures + 3 (table key)*, where "*number of selected contexts*" is the number of cards where one or more attributes have been selected in the **Attributes** section.
- For the cards in the **Attributes** section: *number of selected attributes + 3 (table key).*

This number must not in any case exceed 1024. Neither a warning nor a block is issued in the Smart Views Web page if the number exceeds this limit.

Entities with a hierarchy might generate loop after project synchronization

When you synchronize the project in the **Smart Views** page, for the entities with a hierarchy (like for example Equipment, OperationExecution, OperationResponse etc.) the hierarchy might generate a loop (for example, Equipment1 → Equipment2 → Equipment1). In that case, in the **Attributes** cards of the smart view the levels cannot be selected for that entity.

Merge of Measures and Attributes requires Smart View selection

In general you should be able to merge measures and attributes either before or after the creation of a smart view. However, you must select a smart view before executing the merge operation. In any case, the merge operation will apply to all the smart views that you have already created or that you will create afterwards.

Data load recommended before MDW purge operation

It is recommended that you execute at least one data load before a purge operation of the MDW database.

However, if you have performed a purge without loading data first, you should follow these steps:

1. Execute a data load.
2. Purge the MDW again.
3. Execute a new data load.

Maximum value for the Sequence field

The value of the **Sequence** field (a number determining a hypothetical execution order of the Operation Responses included in the same Operation Execution) in a MDW entity must not exceed 32767. If in the source entity the sequence value exceeds this number, you should modify the contract of the entity that contains the sequence field and execute a new calculation to bring back the sequence to the correct value. For more details on this parameter, see the documentation of *Opcenter Execution Discrete* and *Opcenter Execution Process*.

License Check delay

When you restart the server, the license check is executed after a delay of five minutes. As a workaround, you can restart the **Siemens.SimaticIT.UAMI.MIStudio20.ServiceHost** service.

UI in German/Chinese/French/Spanish may show labels in English

In the German, Chinese, French or Spanish UI some labels may be shown in English.

Deselecting Rows in Tables

To deselect an item in tables, you have to hold down the CTRL key and click the row you want to deselect. Please ignore the small grey square and plus sign that are shown on the bottom-right corner when you hover the mouse on the cell.

7.2 Opcenter Reporting Functional Limitations

Run the setup as Administrator

The setup file **Start.exe** located in the ISO root folder must be executed as administrator (right-click the file and select **Run as administrator**).

Report images not exported nor imported with reports

The images used in reports are not exported nor imported with the reports. As a result, after you have imported a report, you must open it and add the missing images again.

Web Designer update not possible using the Modify option

When an update of Combit® List & Label Designer is available and you open a report in Opcenter Reporting using the Designer, you are prompted to **Modify, repair or remove the program**.
However, the **Modify** option is not visible, and the **Repair** option would not update the program. You must select **Remove** to uninstall the Web Designer, then open the report again to be prompted to download and install the updated version of the Web Designer.

8 Known Technical Issues

Opcenter Intelligence

ID	Description
203764	In the Smart Views page the Merge button must always be enabled in the command bar The selection of a smart view should not be required before a merge of measures or attributes; therefore the **Merge** button should always be enabled in the **Smart Views** page, even when no smart view has been selected. However, a smart view must be selected before executing the merge operation.

SQL Server Known Technical Issues

Snapshot isolation level should always be enabled for SSISDB

When the SQL Server SSISDB is created, the snapshot isolation level is disabled by default. This can ensue a deadlock during the parallel execution of two ETL flows. It is suggested that you enable the snapshot isolation level on this DB and set it as default for all transactions.

Random flow execution issues depending on the installed SQL Server version

If you are using Microsoft SQL Server 2019 versions previous to Cumulative Update 9, random issues may occur during flow execution. The installation of the latest SQL Server version is therefore recommended.