- version 1.5.1 or later for updating the environment from a software version previous to 1.5.1 the following steps must be done:
 - 1) execute the following query in the AUTHDB:

```
DELETE FROM AUTH_DB_CONNECTION;

DELETE FROM AUTH_CONNECTION_STRING;
```

- 2) save the node from the Node Configuration page
- for updating the environment from a software version previous to 1.5.3 the main\files\UpdateScript\DDB_UpdateVers1.5.3.sql script must be executed in the DDB.

The same script should be executed when using a version previous to 1.5.3 with datasets with not annual frequency referencing year 2021 or later.

- for updating the environment from a software version previous to 1.8.0 the main\files\UpdateScript\AUTHDB_UpdateVers1.8.0.sql script must be executed in the AUTHDB.
- version 1.9.0 introduces some breaking changes in configurations and databases. This steps must be followed to update a previous MDM version:
- scripts DDB_UpdateVers1.9.0.sql, RMDB_UpdateVers1.9.0 and MSDB_UpdateVers1.9.0.sql must be executed in the corrispondent DB
 - file main\app\ws\NODE API\config\nodesConfigDefault.json must be added
 - in main\app\ws\NODE_API\appsettings.json the following lines must be added at base level:

```
"PasswordRequireUppercase": true,

"PasswordRequireUppercase": true,

"PasswordRequireDigit": true,

"PasswordRequireUppercase": true,

"PasswordRequireDigit": true,
```

"PasswordCheckPrevious": true

- in main\app\ws\NODE_API\config\appConfig.json the following line must be added in "User Interface" section:

"DefaultSidebar2ndLevelMenu": false,

- Nodes' configuration should be redefined from scratch deleting all existent nodes.

Alternatively in main\app\ws\NODE_API\config\nodesConfig.json nodes' annotation configuration section must be changed with the following lines:

```
"Annotations": {
"HaveMetadata": {
 "Id": "HAVE_METADATA",
 "Type": "HAVE_METADATA"
},
"DDBDataflow": {
"Id": "DDBDataflow",
 "Type": "DDBDataflow"
},
"Metadataset": {
"Id": "AssociatedMetadataSet",
"Type": "AssociatedMetadataSet"
},
"AssociatedCube": {
"Id": "AssociatedCube",
 "Type": "AssociatedCube"
},
"CustomDSD": {
"Id": "CustomDSD",
"Type": "CustomDSD"
},
"Changed": {
"Id": "CHANGED",
```

```
"Type": "CHANGED"
},
"LayoutRow": {
"Id": "LAYOUT_ROW",
"Type": "LAYOUT_ROW"
},
"LayoutColumn": {
"Id": "LAYOUT_COLUMN",
"Type": "LAYOUT COLUMN"
},
"LayoutRowSection": {
"Id": "LAYOUT_ROW_SECTION",
"Type": "LAYOUT_ROW_SECTION"
},
"LayoutFilter": {
"Id": "LAYOUT_FILTER",
"Type": "LAYOUT_FILTER"
},
"NotDisplayed": {
"Id": "NOT_DISPLAYED",
"Type": "NOT_DISPLAYED"
},
"FullName": {
"Id": "FULL_NAME",
"Type": "FULL_NAME"
},
"Default": {
 "TimePeriodStart": "TIME_PERIOD_START",
 "TimePeriodEnd": "TIME_PERIOD_END",
 "LastNObservation": "LASTNOBSERVATION",
 "LastNPeriod": "LASTNPERIOD",
 "Id": "DEFAULT",
```

```
"Type": "DEFAULT"
},
"ConceptSchemesOrder": {
 "Id": "ORDER",
"Type": "ORDER"
},
"CategorySchemesOrder": {
 "Id": "ORDER",
"Type": "ORDER"
},
"CodelistsOrder": {
 "Id": "ORDER",
"Type": "ORDER"
},
"CategorisationsOrder": {
 "Id": "ORDER",
"Type": "ORDER"
},
"AttachedFilePath": {
 "Id": "ATTACHED_FILE_PATH",
"Type": "ATTACHED_FILE_PATH"
},
"RestrictedForPublication": {
 "Id": "RESTRICTED_FOR_PUBLICATION",
"Type": "RESTRICTED_FOR_PUBLICATION"
},
"DCAT_IsMultilingual": {
 "Id": "SDMX21_IsMultilingual",
"Type": "SDMX21_IsMultilingual"
},
"CustomIsPresentational": {
 "Id": "CUSTOM_IS_PRESENTATIONAL",
```

```
"Type": "CUSTOM_IS_PRESENTATIONAL"
},
"LayoutDataflowKeywords": {
 "Id": "LAYOUT_DATAFLOW_KEYWORDS",
 "Type": "LAYOUT_DATAFLOW_KEYWORDS"
},
"LayoutCriteriaSelection": {
 "Id": "LAYOUT CRITERIA SELECTION",
 "Type": "LAYOUT CRITERIA SELECTION"
},
"LayoutAttachedDataFiles": {
 "Id": "LAYOUT_ATTACHED_DATA_FILES",
 "Type": "LAYOUT_ATTACHED_DATA_FILES"
},
"LayoutDefaultPresentation": {
 "Id": "LAYOUT_DEFAULT_PRESENTATION",
 "Type": "LAYOUT_DEFAULT_PRESENTATION"
},
"LayoutDecimalSeparator": {
 "Id": "LAYOUT_DECIMAL_SEPARATOR",
 "Type": "LAYOUT_DECIMAL_SEPARATOR"
},
"LayoutNumberOfDecimals": {
 "Id": "LAYOUT_NUMBER_OF_DECIMALS",
 "Type": "LAYOUT_NUMBER_OF_DECIMALS"
},
"LayoutReferenceMetadata": {
 "Id": "LAYOUT_REFERENCE_METADATA",
 "Type": "LAYOUT_REFERENCE_METADATA"
},
"LayoutEmptyCellPlaceholder": {
 "Id": "LAYOUT_EMPTY_CELL_PLACEHOLDER",
```

```
"Type": "LAYOUT_EMPTY_CELL_PLACEHOLDER"
},
"LayoutDataflowNotes": {
 "Id": "LAYOUT_DATAFLOW_NOTES",
"Type": "LAYOUT_DATAFLOW_NOTES"
},
"LayoutMaxTableCells": {
 "Id": "LAYOUT_MAX_TABLE_CELLS",
"Type": "LAYOUT MAX TABLE CELLS"
},
"LayoutTerritorialDimensionIds": {
 "Id": "LAYOUT_TERRITORIAL_DIMENSION_IDS",
"Type": "LAYOUT_TERRITORIAL_DIMENSION_IDS"
},
"LayoutDataflowSource": {
 "Id": "LAYOUT_DATAFLOW_SOURCE",
"Type": "LAYOUT_DATAFLOW_SOURCE"
},
"LastUpdate": {
 "Id": "LAST_UPDATE",
"Type": "LAST_UPDATE"
},
"LinkedDataflowNode": {
 "Id": "LINKEDDATAFLOWNODE",
"Type": "LINKEDDATAFLOWNODE"
},
"DataflowCatalogType": {
 "Id": "DataflowCatalogType",
 "Type": "DataflowCatalogType"
},
"LayoutChartPrimaryDim": {
 "Id": "LAYOUTCHARTPRIMARYDIM",
```

```
"Type": "LAYOUTCHARTPRIMARYDIM"
},
"LayoutChartSecondaryDim": {
 "Id": "LAYOUTCHARTSECONDARYDIM",
"Type": "LAYOUTCHARTSECONDARYDIM"
},
"LayoutChartFilter": {
 "Id": "LAYOUTCHARTFILTER",
"Type": "LAYOUTCHARTFILTER"
},
"LayoutDataflowHidden": {
 "Id": "DATAFLOW_HIDDEN",
"Type": "DATAFLOW_HIDDEN"
},
"TemporalDimOrder": {
 "Id": "TEMPORAL_DIM_ORDER",
"Type": "TEMPORAL_DIM_ORDER"
},
"DisabledViewers": {
 "Id": "DISABLED_VIEWERS",
"Type": "DISABLED_VIEWERS"
},
"TableLockedDims": {
 "Id": "TABLE_LOCKED_DIMS",
"Type": "TABLE_LOCKED_DIMS"
},
"GraphLockedDims": {
 "Id": "GRAPH_LOCKED_DIMS",
"Type": "GRAPH_LOCKED_DIMS"
},
"HCLReference": {
 "Id": "@SDMX",
```

```
"Type": "HIER_CONTEXT"
}
},
```

Personalization of the configuration must be reported properly. Please note that annotation's type for LinkedataflowNode is now LINKEDDATAFLOWNODE.

- version 2.0.0 introduces a new technological upgrade (.NET 6.0), new features and plugin management. To update MDM version, follow these steps:
- install .NET Core Runtime and the ASP.NET Core Module 6.0 in order to allow ASP.NET Core app to run with IIS. Download and execute Hosting Bundle 6.0.20 from:

https://dotnet.microsoft.com/en-us/download/dotnet/thank-you/runtime-aspnetcore-6.0.20-windows-hosting-bundle-installer

- run scripts AUTHDB_UpdateVers2.0.0.sql in AUTHDB
- run scripts DDB_UpdateVers2.1.4.sql in DDB
- Nodes' configuration should be redefined from scratch deleting all existent nodes.

Otherwise, in main\app\ws\NODE_API\config\nodesConfig.json:

- add the following lines at the end of the "Annotations" section of each node:

```
"Annotations": {

"DDBContentConstraint": {

"Id": "DDB_CONTENT_CONSTRAINT",

"Type": "DDB_CONTENT_CONSTRAINT"

},

"AnticipationExceedingMaxNumRecords": {

"Id": "ANITICIP_EXCEEDING_MAX_NUM_REC",

"Type": "ANITICIP_EXCEEDING_MAX_NUM_REC"

},

"LayoutMapFilter": {
```

```
"Id": "LAYOUTMAPFILTER",
    "Type": "LAYOUTMAPFILTER"
}
```

- for updating the environment from the software version 2.0.0 to 2.1.10

the main\files\UpdateScript\AUTHDB_UpdateVers2.1.0.sql and main\files\UpdateScript\AUTHDB_UpdateVers2.1.8.sql scripts must be executed in the AUTHDB.

the main\files\UpdateScript\DDB_UpdateVers2.1.4.sql and main\files\UpdateScript\DDB_UpdateVers2.1.6.sql scripts must be executed in the DDB.

- Nodes' configuration should be redefined from scratch deleting all existent nodes.

Otherwise, in main\app\ws\NODE_API\config\nodesConfig.json:

- add the following lines at the end of the "Annotations" section of each node:

```
"Annotations": {

"NonReadyForProduction": {

"Id": "NON_READY_FOR_PRODUCTION",

"Type": "NON_READY_FOR_PRODUCTION"
},

"ReadyForProduction": {

"Id": "READY_FOR_PRODUCTION",

"Type": "READY_FOR_PRODUCTION"
},

"DataFlowHeaderCustom": {

"Id": "DATAFLOW_HEADER_CUSTOM",

"Type": "DATAFLOW_HEADER_CUSTOM"
},

"Type": "DATAFLOW_HEADER_CUSTOM"
}
```

- add the following lines at the end of the "DataManagement" section in main\app\ws\NODE_API\config\appConfig.json:

```
"DataManagement": {
        "DatasetPrefix": "DS_",
        "StruvalFormat": "structurespecificdata",
        "LimitPagingMa": 500,
        "MaxRowsErrorMappingValidation": 100
       },
- for updating the environment from the software version 2.1.10 to 2.1.11
       the main\files\UpdateScript\DDB UpdateVers2.1.11.sql script must be executed in the DDB.
       - Nodes' configuration should be redefined from scratch deleting all existent nodes.
  Otherwise, in main\app\ws\NODE_API\config\nodesConfig.json:
  - add the following lines at the end of the "Annotations" section of each node:
       "Annotations": {
   "AttributeAsDim": {
    "Id": "ATTRIBUTE_AS_DIM",
    "Type": "ATTRIBUTE_AS_DIM"
   },
   "LayoutAggregateCells": {
    "Id": "LAYOUT_AGGREGATE_CELLS",
    "Type": "LAYOUT AGGREGATE CELLS"
   },
   "LayoutChartPrimaryDimCartesian": {
    "Id": "LAYOUT_CHART_PRIMARY_DIM_CARTESIAN",
    "Type": "LAYOUT_CHART_PRIMARY_DIM_CARTESIAN"
```

},

"LayoutChartSecondaryDimCartesian": {

```
"Id": "LAYOUT_CHART_SECONDARY_DIM_CARTESIAN",
  "Type": "LAYOUT CHART SECONDARY DIM CARTESIAN"
 },
 "LayoutChartFilterCartesian": {
  "Id": "LAYOUT_CHART_FILTER_CARTESIAN",
 "Type": "LAYOUT_CHART_FILTER_CARTESIAN"
 },
 "GraphLockedDimsCartesian": {
  "Id": "GRAPH_LOCKED_DIMS_CARTESIAN",
  "Type": "GRAPH LOCKED DIMS CARTESIAN"
 },
 "LayoutChartPrimaryDimRadial": {
  "Id": "LAYOUT_CHART_PRIMARY_DIM_RADIAL",
  "Type": "LAYOUTCHARTPRIMARYDIM RADIAL"
 },
 "LayoutChartSecondaryDimRadial": {
  "Id": "LAYOUT_CHART_SECONDARY_DIM_RADIAL",
  "Type": "LAYOUT CHART SECONDARY DIM RADIAL"
 },
 "LayoutChartFilterRadial": {
  "Id": "LAYOUT_CHART_FILTER_RADIAL",
  "Type": "LAYOUT_CHART_FILTER_RADIAL"
 },
 "GraphLockedDimsRadial": {
  "Id": "GRAPH_LOCKED_DIMS_RADIAL",
  "Type": "GRAPH LOCKED DIMS RADIAL"
 },
 "LayoutCategorySchemesOrder": {
  "Id": "LAYOUT_CATEGORY_SCHEMES_ORDER",
  "Type": "LAYOUT_CATEGORY_SCHEMES_ORDER"
 }
},
```

- add the following line at the end of the "DataManagement" section in main\app\ws\NODE_API\config\appConfig.json: "DataManagement": { "BlackListQueryWord": "INDICATOR|TIME|VALUES|VALUE" }, - for updating the environment from the software version 2.1.11 to 2.1.12 - rename the following annotations: "Annotations": { "GraphLockedDimsCartesian": { "Id": "GRAPH_LOCKED_DIMS_CARTESIAN", "Type": "GRAPH_LOCKED_DIMS_CARTESIAN" }, "GraphLockedDimsRadial": { "Id": "GRAPH_LOCKED_DIMS_RADIAL", "Type": "GRAPH_LOCKED_DIMS_RADIAL" }, "LayoutCategorySchemesOrder": { "Id": "LAYOUT_CATEGORY_SCHEMES_ORDER", "Type": "LAYOUT_CATEGORY_SCHEMES_ORDER" } }, in:

"Annotations": {

"LayoutGraphLockedDimsCartesian": {

"Id": "LAYOUT_GRAPH_LOCKED_DIMS_CARTESIAN",

```
"Type": "LAYOUT_GRAPH_LOCKED_DIMS_CARTESIAN"
},

"LayoutGraphLockedDimsRadial": {

"Id": "LAYOUT_GRAPH_LOCKED_DIMS_RADIAL",

"Type": "LAYOUT_GRAPH_LOCKED_DIMS_RADIAL"
},

"LayoutCategorySchemesOrder": {

"Id": "ORDER",

"Type": "ORDER"
}
```