



## **Electronic Data Platform**

### **Description of Storage Section**

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# 1. Introduction

## 1.1 Purpose of this document

The purpose of this document is to describe all the automatic downloads that will be available on the Electronic Data Platform for the Storage context.

Note that from the go-live date of the new federated portal, the data about the 2 VSI locations will not be displayed or downloadable anymore.

## 1.2 General remarks

### 1.2.1 Base URL

<https://api.gasdata.fluxys.com/StorageHandler/reports>

NB: The access to the automatic downloads needs a valid token retrieved after a successful authentication to the server <https://xumais.gasdata.fluxys.com/connect/token> ( see technical requirements document for detail)

### 1.2.2 File Formatting

The XML Schema Definition (XSD) and the full sample XML file and/or CSV file for each of the reports mentioned in this document is provided in the relevant folder on the Fluxys website.

### 1.2.3 Selecting a period

From/To dates entered for period selection are always included in that period. This means that by denoting DateFrom "2012-04-01" and DateTo "2012-04-02", a period of 2 days is selected.

The following section gives an overview of the reports.

# 2. Electronic Data Platform Automated Downloads

## 2.1 FlowMeasurementOnNode

### 2.1.1 Description

This data publication contains flow measurements during the selected period on all the nodes for which the customer has view rights during that period. This publication is available on hourly and updated hourly basis.

This publication is returned for the following Data Publication Types:

- *HourlyFlowMeasurementOnNode*  
All the nodes on which the customer has view rights during the requested date range (DateFrom, DateTo) are returned.  
The flow measurements for each node are returned per hour.
- *CorrectedHourlyFlowMeasurementOnNode*  
All the nodes on which the customer has view rights and on which updates have been done during the requested date range (DateFrom, DateTo) are returned.  
The flow measurements for each node are returned per hour.

Relative URL: [/WebTrack/flowmeasurement/node/new/hourly/get](#)

## 2.1.2 Parameters

### 2.1.2.1 *type*

- default : HourlyFlowMeasurementOnNode
- corrected : CorrectedHourlyFlowMeasurementOnNode

If no parameter type inserted, then the default one is selected.

### 2.1.2.2 *periodfrom – periodto*

This is the period for which data is retrieved.

Dates are expressed in the YYYY-MM-DD format.

Period is limited to one month if no node is defined.

#### 2.1.2.2.1 *identificationfilter*

Node for which the data is retrieved. This parameter contains the codification number. Only available in the new codification publication.

If parameter is inserted, the period limit is extended to one year.

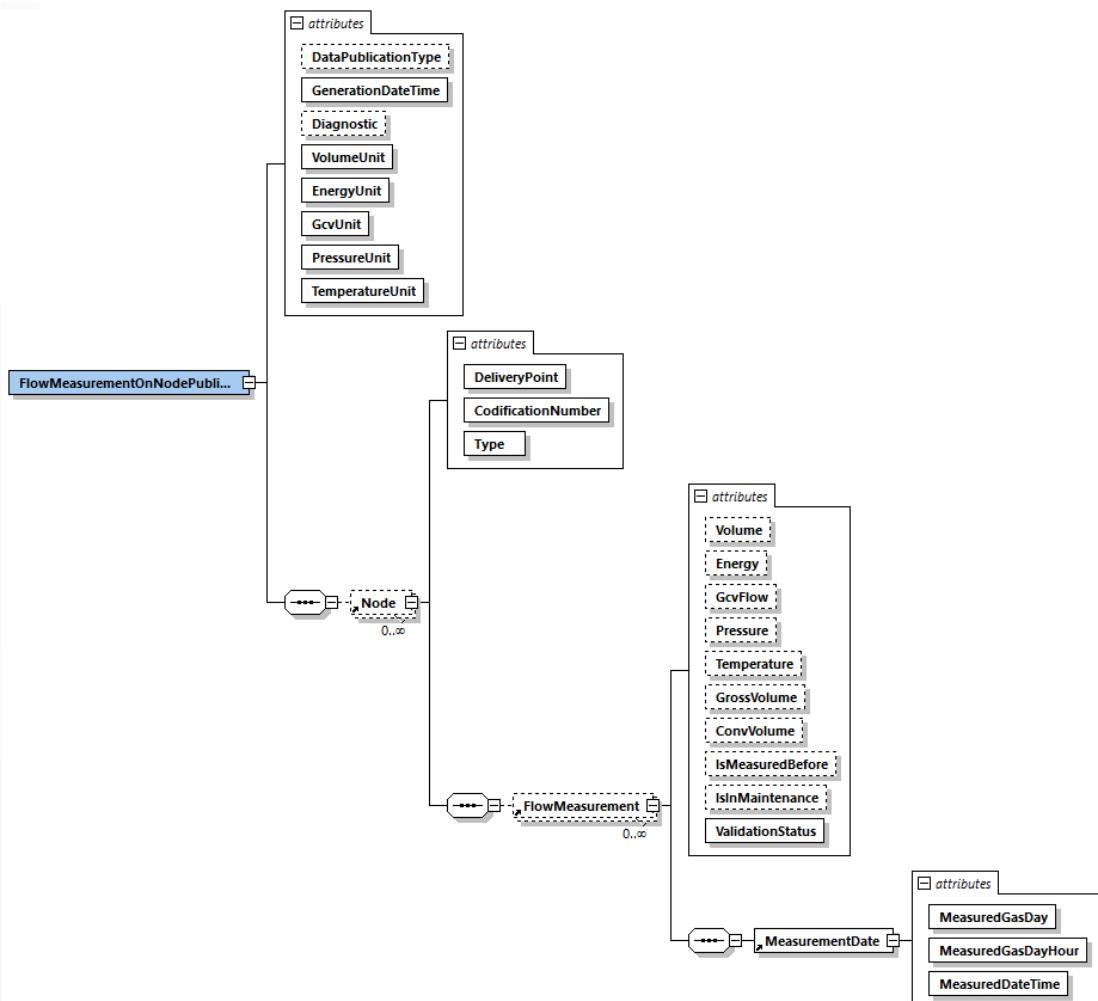
### 2.1.2.3 *Format types available*

The format types are filled in the header of the http request

- CSV : “text/csv”
- XML : “text/xml”

## 2.1.3 XML format

### 2.1.3.1 XSD (new codification)



The validationStatus of the measurements...

NoData	There is no data available for the requested measurement.
Raw	These measurements are not validated.
Verified	A first verification of the measurements has been done.
Validated	These measurements are validated.

### 2.1.3.2 XML snippet

The full XML *sample*, containing data for HourlyFlowMeasurementOnNode can be found in the XML folder on the Fluxys website.

The following *snippet* gives an impression of how the XML looks like:

```

<FlowMeasurementOnNodePublication DataPublicationType="FlowMeasurementOnNode"
GenerationDateTime="2012-06-04T10:48:43" Diagnostic="NoError" VolumeUnit="m³" EnergyUnit="kWh"
GcvUnit="kWh/m³" PressureUnit="bar" TemperatureUnit="°C"
xmlns="http://extranet.fluxys.net/namespace/dps/FlowMeasurementOnNode">
  <Node DeliveryPoint="20210" CodificationNumber="20210-N01" Type="BorderNode">
    <FlowMeasurement Volume="0.00000" Energy="0.00000" GcvFlow="11.61416"
      ValidationStatus="Validated">
      <MeasurementDate MeasuredGasDay="2012-04-01" MeasuredGasDayHour="1"
        MeasuredDateTime="2012-04-01T10:48:43Z" />
    </FlowMeasurement>
  </Node>
</FlowMeasurementOnNodePublication>
  
```

```

    MeasuredDateTime="2012-04-01T04:00:00" />
</FlowMeasurement>
<FlowMeasurement Volume="0.00000" Energy="0.00000" GcvFlow="11.61404"
ValidationStatus="Validated">
<MeasurementDate MeasuredGasDay="2012-04-01" MeasuredGasDayHour="2"
MeasuredDateTime="2012-04-01T05:00:00" />
</FlowMeasurement>
...
<FlowMeasurement Volume="0.00000" Energy="0.00000" GcvFlow="11.61314"
ValidationStatus="Validated">
<MeasurementDate MeasuredGasDay="2012-04-02" MeasuredGasDayHour="1"
MeasuredDateTime="2012-04-02T04:00:00" />
</FlowMeasurement>
...
</Node>
</FlowMeasurementOnNodePublication>
```

## 2.1.4 CSV format

The full CSV *sample*, containing data for HourlyFlowMeasurementOnNode can be found in the CSV folder on the Fluxys website.

The following *snippet* gives an impression of how the CSV file looks like:

```

NodeDeliveryPoint,NodeCodificationNumber,NodeType,FlowMeasurementVolume,VolumeUnitSymbolExternal,Flow
MeasurementEnergy,EnergyUnitSymbolExternal,FlowMeasurementGcvFlow,GcvUnitSymbolExternal,FlowMeasure
mentPressure,PressureUnitSymbolExternal,FlowMeasurementTemperature,TemperatureUnitSymbolExternal,FlowMe
asurementGrossVolume,GrossVolumeUnitSymbolExternal,FlowMeasurementConvVolume,ConvVolumeUnitSymbolEx
ternal,FlowMeasurementValidationStatus,FlowMeasurementMeasurementDateGasDay,FlowMeasurementMeasure
mentDateGasDayHour,FlowMeasurementMeasurementDateMeasuredDateTime
20210,20210-N01,BorderNode,-173589.5608826,m³,-
2012191.809422777777777777779,kWh,11.591663687563888888888890,kWh/m³,72.26039,bar,14.336799621
6,°C,-2149.92,m³(b),0,m³,Validated,2020-01-01,1,2020-03-05 05:00:00
20210,20210-N01,BorderNode,-173187.1495972,m³,-
2007655.126872500000000000002,kWh,11.5924023897972222222222223,kWh/m³,72.29493,bar,16.738435745
2,°C,-2135.879,m³(b),0,m³,Validated,2020-01-01,2,2020-03-05 06:00:00
20210,20210-N01,BorderNode,-173514.1298218,m³,-
2011400.571815833333333333335,kWh,11.5921428063638888888888890,kWh/m³,72.2861,bar,15.5697727203
,°C,-2138.019,m³(b),0,m³,Validated,2020-01-01,3,2020-03-05 07:00:00
...
```

## 2.1.5 Example URL

The following URL can be used to download a publication with hourly flow measurements on all the nodes for which the customer has view rights during the first 2 days of July 2016. The returned file is in XML format.

<https://api.gasdata.fluxys.com/StorageHandler/reports/WebTrack/flowmeasurement/node/new/hourly/get?periodfrom=2016-07-01&periodto=2016-07-02&type=default>

## 2.2 FlowMeasurementOnMeteringLine

### 2.2.1 Description

This data publication contains flow measurements during the selected period on all the metering lines for which the customer has view rights during that period. This publication is available hourly and updated on an hourly basis.

This publication is returned for the following Data Publication Types:

- *HourlyFlowMeasurementOnMeteringLine*  
All the metering lines on which the customer has view rights during the requested date range (DateFrom, DateTo) are returned.  
The flow measurements for each metering line are returned per hour.

- *CorrectedHourlyFlowMeasurementOnMeteringLine*  
All the metering lines on which the customer has view rights and on which updates have been done during the requested date range (DateFrom, DateTo) are returned.  
The flow measurements for each metering line are returned per hour.

Relative URL: [/WebTrack/flowmeasurement/meteringline/new/hourly/get](#)

## 2.2.2 Parameters

### 2.2.2.1 type

- default : HourlyFlowMeasurementOnMeteringLine
- corrected : CorrectedHourlyFlowMeasurementOnMeteringLine

If no parameter type inserted, then the default one is selected.  
Type 'corrected' only available for the old codification.

### 2.2.2.2 periodfrom – periodto

This is the period for which data is retrieved.  
Dates are expressed in the YYYY-MM-DD format.  
Period is limited to one month if no node is defined.

### 2.2.2.3 identificationfilter

Metering Line for which the data is retrieved. This parameter contains the business identifier.  
Only available in the new codification publication.  
If parameter is inserted, the period limit is extended to one year.

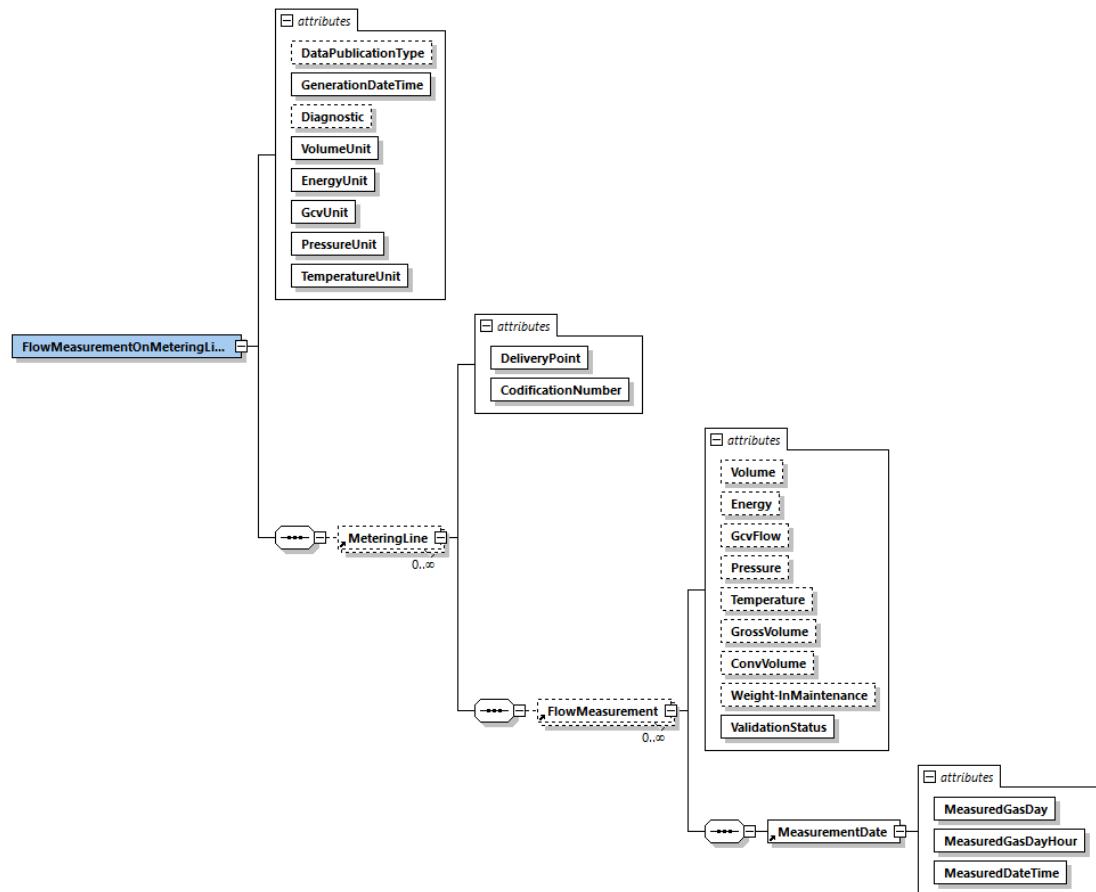
### 2.2.2.4 Format types available

The format types are filled in the header of the http request

- CSV : "text/csv"
- XML : "text/xml"

## 2.2.3 XML format

### 2.2.3.1 XSD



The validationStatus of the measurements...

NoData	There is no data available for the requested measurement.
Raw	These measurements are not validated.
Verified	A first verification of the measurements has been done.
Validated	These measurements are validated.

### 2.2.3.2 XML snippet

The full XML *sample*, containing data for `HourlyFlowMeasurementOnMeteringLine` can be found in the XML folder on the Fluxys website.

The following *snippet* gives an impression of how the XML looks like:

```

<FlowMeasurementOnMeteringLinePublication
  DataPublicationType="FlowMeasurementOnMeteringLine"
  GenerationDateTime="2012-06-04T10:31:46" Diagnostic="NoError"
  VolumeUnit="m³" EnergyUnit="kWh"
  GcvUnit="kWh/m³" PressureUnit="bar" TemperatureUnit="°C"
  xmlns="http://extranet.fluxys.net/namespace/dps/FlowMeasurementOnMeteringLine">
  <MeteringLine DeliveryPoint="20210A/1" CodificationNumber="20210A/1">
    <FlowMeasurement Volume="0.00000" Energy="0.00000" GcvFlow="11.61416"
      IsMeasuredBefore="false" IsInMaintenance="false" ValidationStatus="Validated">
      <MeasurementDate MeasuredGasDay="2012-04-01" MeasuredGasDayHour="1">
    
```

```

    MeasuredDateTime="2012-04-01T04:00:00" />
</FlowMeasurement>
<FlowMeasurement Volume="0.00000" Energy="0.00000" GcvFlow="11.61404"
    IsMeasuredBefore="false" IsnMaintenance="false" ValidationStatus="Validated">
    <MeasurementDate MeasuredGasDay="2012-04-01" MeasuredGasDayHour="2"
        MeasuredDateTime="2012-04-01T05:00:00" />
</FlowMeasurement>
...
</MeteringLine>
...
</FlowMeasurementOnMeteringLinePublication>

```

## 2.2.4 CSV format

The full CSV *sample*, containing data for HourlyFlowMeasurementOnMeteringLine can be found in the CSV folder on the Fluxys website.

The following *snippet* gives an impression of how the CSV file looks like:

```

LineDeliveryPoint,LineCodificationNumber,FlowMeasurementWeightInMaintenance,FlowMeasurementVolume,VolumeUnitSymbolExternal,FlowMeasurementEnergy,EnergyUnitSymbolExternal,FlowMeasurementGcvFlow,GcvUnitSymbolExternal,FlowMeasurementPressure,PressureUnitSymbolExternal,FlowMeasurementTemperature,TemperatureUnitSymbolExternal,FlowMeasurementGrossVolume,GrossVolumeUnitSymbolExternal,FlowMeasurementConvVolume,ConvVolumeUnitSymbolExternal,FlowMeasurementValidationStatus,FlowMeasurementMeasurementDateGasDay,FlowMeasurementMeasurementDateGasDayHour,FlowMeasurementMeasurementDateMeasuredDateTime
20210,20210-
N01/A/1,1,73503.32217407,m³,863452.1775350000000000000000001,kWh,11.7471177083694444444444445,kWh/
m³,69.00773,bar,10.0205354691,°C,969.8735,m3(b),0,m³,Validated,2021-04-01,1,2021-04-01 04:00:00
20210,20210-
N01/A/1,1,73345.24829102,m³,861555.95410944444444444445,kWh,11.7465817375250000000000000000001,kWh/
m³,62.03681,bar,9.8188829422,°C,983.3511,m3(b),0,m³,Validated,2021-04-01,2,2021-04-01 05:00:00
20210,20210-
N01/A/1,1,73419.08618164,m³,861478.4131563888888888890,kWh,11.733712008141666666666666668,kWh/
m³,65.75648,bar,9.751209259,°C,1007.389,m3(b),0,m³,Validated,2021-04-01,3,2021-04-01 06:00:00
...

```

The following URL can be used to download a publication with hourly flow measurements on all the metering lines for which the customer has view rights during the first 2 days of April 2016. The returned file is in XML format.

<https://api.gasdata.fluxys.com/StorageHandler/reports/WebTrack/flowmeasurement/meteringline/new/hourly/get?periodfrom=2018-04-01&periodto=2018-04-02&type=default>

## 2.3 GasAnalysisOnNode

### 2.3.1 Description

This data publication contains the gas analysis during the selected period on all the nodes for which the customer has view rights during that period. This publication is available on hourly and aggregated daily basis.

This publication is returned for the following Data Publication Types:

- *HourlyGasAnalysisOnNode*  
All the nodes on which the customer has view rights during the requested date range (DateFrom, DateTo) are returned.  
The gas analysis for each node is returned per hour.

Relative URL : [/WebTrack/gasanalysis/node/new/hourly/get](#)

- *DailyGasAnalysisOnNode*  
All the nodes on which the customer has view rights during the requested date range

(DateFrom, DateTo) are returned.

For each node the gas analysis is aggregated and returned per day.

Relative URL: [/WebTrack/gasanalysis/node/new/daily/get](#)

## 2.3.2 Parameters

### 2.3.2.1 *periodfrom – periodto*

This is the period for which data is retrieved.

Dates are expressed in the YYYY-MM-DD format.

Period is limited to one month if no node is defined.

### 2.3.2.2 *identificationfilter*

Node for which the data is retrieved. This parameter contains the codification number. Only available in the new codification publication.

If parameter is inserted, the period limit is extended to one year.

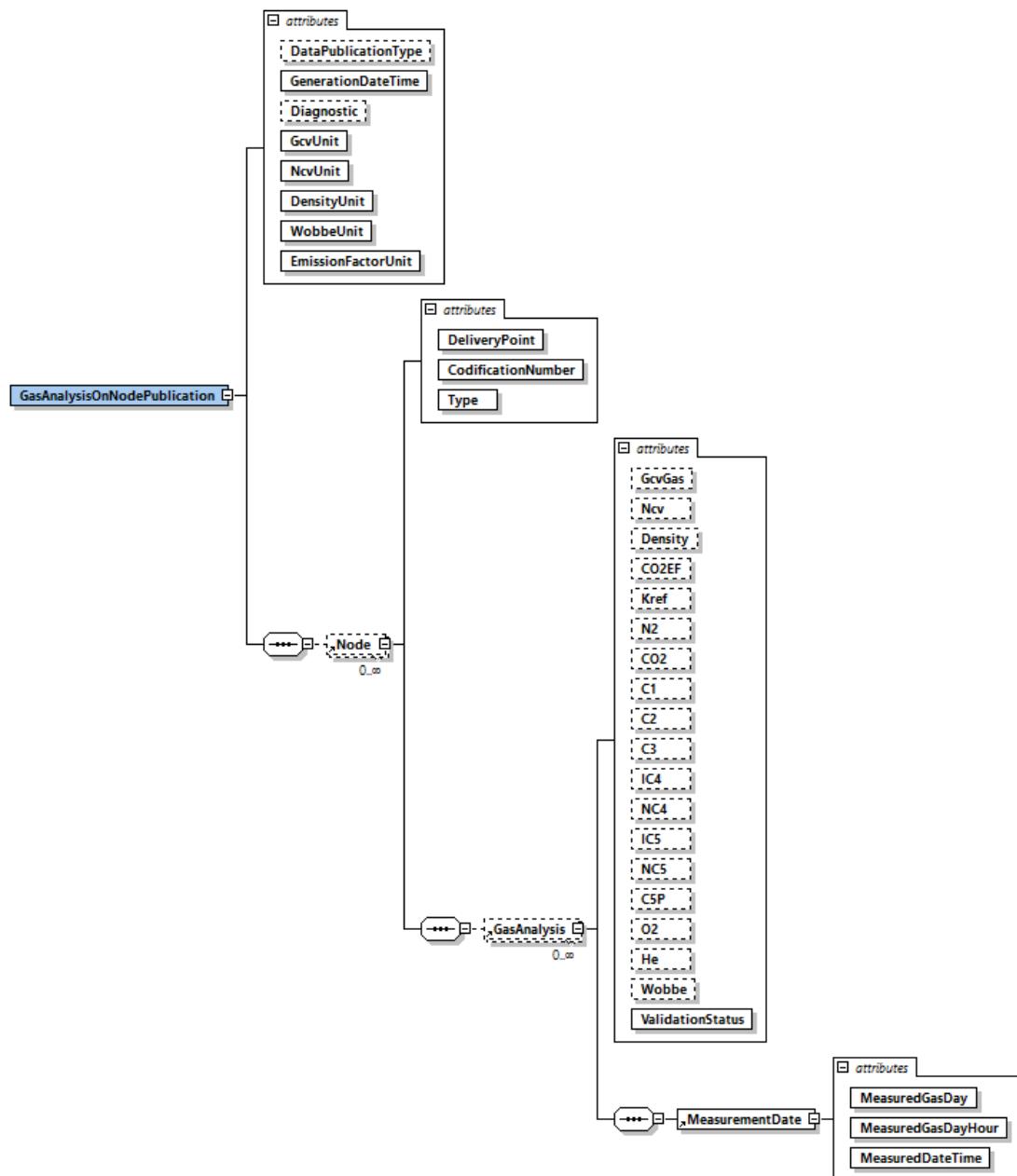
### 2.3.2.3 *Format types available*

The format types are filled in the header of the http request

- CSV : “text/csv”
- XML : “text/xml”

### 2.3.3 XML format

#### 2.3.3.1 XSD



### 2.3.3.2 XML snippet

The full XML *sample*, containing data for HourlyGasAnalysisOnNode can be found in the XML folder on the Fluxys website.

The following *snippet* gives an impression of how the XML looks like:

```
<GasAnalysisOnNodePublication DataPublicationType="GasAnalysisOnNode"
GenerationDateTime="2012-06-05T13:12:35" Diagnostic="NoError" GcvUnit="kWh/m3"
NcvUnit="kWh/m3" DensityUnit="kg/m3" WobbeUnit="kWh/m3" EmissionFactorUnit="t/TJ"
xmlns="http://extranet.fluxys.net/namespace/dps/GasAnalysisOnNode">
  <Node DeliveryPoint="20210A/1" CodificationNumber="20210-N01" Type="BorderNode">
    <GasAnalysis GcvGas="11.32972" Ncv="10.22694" Density="0.77488" CO2EF="56.64696"
      Kref="0.89424" N2="1.36660" CO2="0.89173" C1="92.50175" C2="4.58494"
      C3="0.42040" IC4="0.13337" NC4="0.06081" IC5="0.02608" NC5="0.01429"
      C5P="0.00000" O2="0.00002" He="0.00000" Wobbe="14.63481"
      ValidationStatus="Raw">
      <MeasurementDate MeasuredGasDay="2012-04-01" MeasuredGasDayHour="1"
        MeasuredDateTime="2012-04-01T04:00:00"/>
    </GasAnalysis>
    <GasAnalysis GcvGas="11.30667" Ncv="10.20566" Density="0.77394" CO2EF="56.64696"
      Kref="0.89473" N2="1.45458" CO2="0.85833" C1="92.61807" C2="4.43636"
      C3="0.40587" IC4="0.12895" NC4="0.05875" IC5="0.02523" NC5="0.01384"
      C5P="0.00000" O2="0.00002" He="0.00000" Wobbe="14.61669"
      ValidationStatus="Raw">
      <MeasurementDate MeasuredGasDay="2012-04-01" MeasuredGasDayHour="2"
        MeasuredDateTime="2012-04-01T05:00:00"/>
    </GasAnalysis>
  </Node>
</GasAnalysisOnNodePublication>
```

### 2.3.4 CSV format

The full CSV *sample*, containing data for HourlyGasAnalysisOnNode can be found in the CSV folder on the Fluxys website.

The following *snippet* gives an impression of how the CSV file looks like:

NodeCodificationNumber	NodeDeliveryPoint	NodeType	GasAnalysisGcvGas	GcvUnit	GasAnalysisNcv	NcvUnit	GasAnalysisDensity	DensityUnit	GasAnalysisWobbe	WobbeUnit	GasAnalysisCO2EF	GasAnalysisCO2EFEUnit	GasAnalysisisKref	GasAnalysisElementsUnit	GasAnalysisN2	GasAnalysisCO2	GasAnalysisC1	GasAnalysisC2	GasAnalysisC3	GasAnalysisC4	GasAnalysisNC4	GasAnalysisIC5	GasAnalysisNC5	GasAnalysisC5P	GasAnalysisO2	GasAnalysisHe	GasAnalysisValidationStatus	GasAnalysisMeasurementDateGasDay	GasAnalysisMeasurementDateGasDayHour	GasAnalysisMeasurementDateMeasuredDateTime			
20210-																																	
20210-	N01,20210,BorderNode,0,kWh/m <sup>3</sup> ,0,kWh/m <sup>3</sup> ,0,kg/m <sup>3</sup> ,14.8662005702472222222222223,kWh/m <sup>3</sup> ,0,t/TJ,0,mol%,0,0,0,0,0,0,0,0,0,NoData,2020-01-01,1,2020-01-01 05:00:00																																
20210-	N01,20210,BorderNode,0,kWh/m <sup>3</sup> ,0,kWh/m <sup>3</sup> ,0,kg/m <sup>3</sup> ,14.8670665979055555555555557,kWh/m <sup>3</sup> ,0,t/TJ,0,mol%,0,0,0,0,0,0,0,0,0,NoData,2020-01-01,2,2020-01-01 06:00:00																																
20210-	N01,20210,BorderNode,0,kWh/m <sup>3</sup> ,0,kWh/m <sup>3</sup> ,0,kg/m <sup>3</sup> ,14.86692405128888888888890,kWh/m <sup>3</sup> ,0,t/TJ,0,mol%,0,0,0,0,0,0,0,0,0,NoData,2020-01-01,3,2020-01-01 07:00:00																																
	...																																

### 2.3.5 Example URL

The following URL can be used to download a publication with the hourly gas analysis on all the nodes for which the customer has view rights during July 2016. The returned file is in XML format.

<https://api.gasdata.fluxys.com/StorageHandler/reports/WebTrack/gasanalysis/node/new/hourly/get?periodfrom=2016-07-01&periodto=2016-07-31>

## 2.4 GasAnalysisOnMeteringLine

### 2.4.1 Description

This data publication contains the gas analysis during the selected period on all the metering lines for which the customer has view rights during that period. This publication is available on hourly and aggregated daily basis.

This publication is returned for the following Data Publication Types:

- *HourlyGasAnalysisOnMeteringLine*  
All the metering lines on which the customer has view rights during the requested date range (DateFrom, DateTo) are returned.  
The gas analysis for each metering line is returned per hour.

Relative URL: [/WebTrack/gasanalysis/meteringline/new/hourly/get](#)

- *DailyGasAnalysisOnMeteringLine*  
All the metering lines on which the customer has view rights during the requested date range (DateFrom, DateTo) are returned.  
The gas analysis for each metering line is aggregated and returned per day.

Relative URL: [/WebTrack/gasanalysis/meteringline/new/daily/get](#)

### 2.4.2 Parameters

#### 2.4.2.1 *periodfrom – periodto*

This is the period for which data is retrieved.

Dates are expressed in the YYYY-MM-DD format.

Period is limited to one month if no metering line is defined.

#### 2.4.2.2 *identificationfilter*

Metering Line for which the data is retrieved. This parameter contains the business identifier.

Only available in the new codification publication.

If parameter is inserted, the period limit is extended to one year.

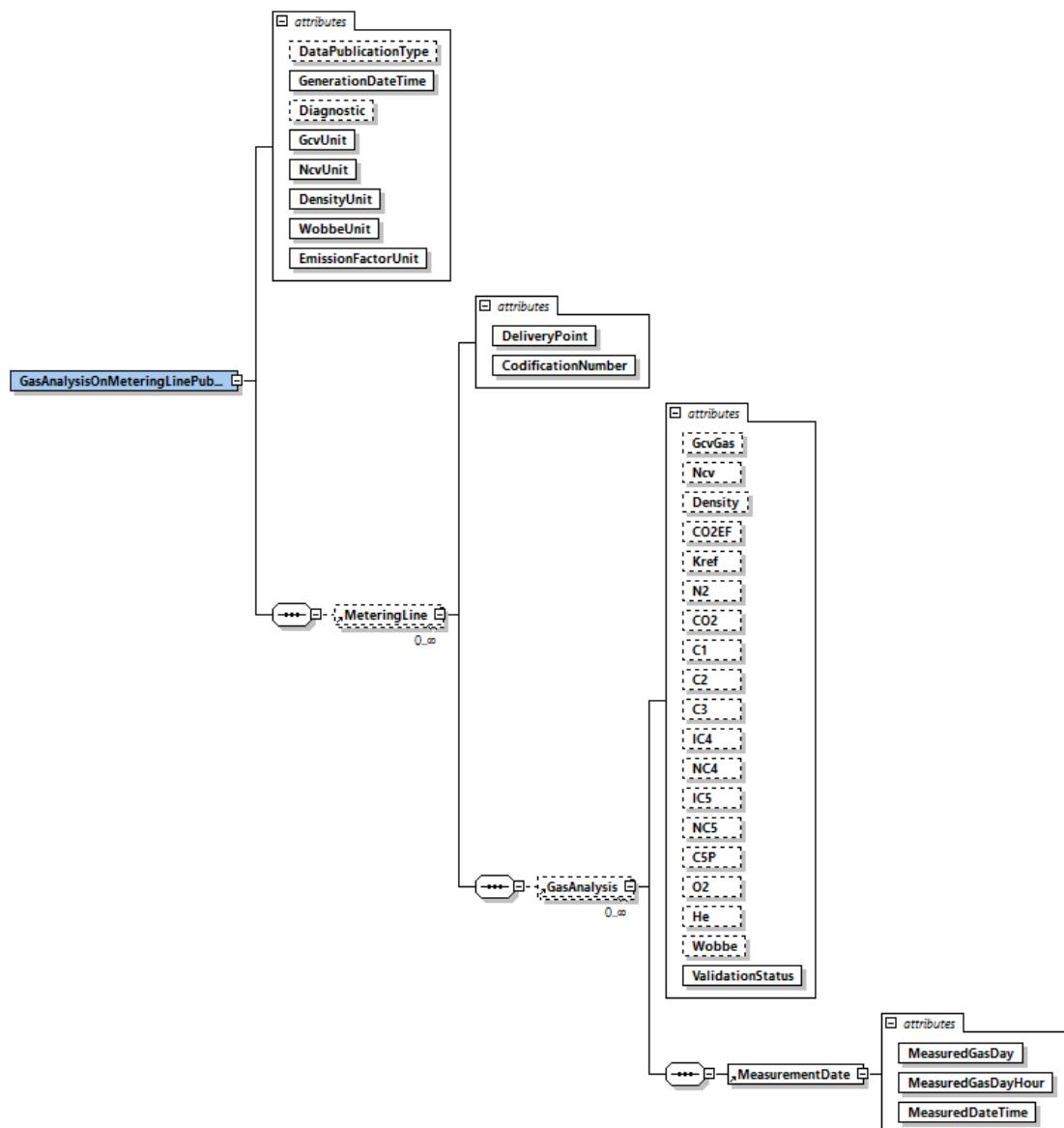
#### 2.4.2.3 *Format types available*

The format types are filled in the header of the http request

- CSV : "text/csv"
- XML : "text/xml"

## 2.4.3 XML format

### 2.4.3.1 XSD



### 2.4.3.2 XML snippet

The full XML *sample*, containing data for HourlyGasAnalysisOnMeteringLine can be found in the XML folder on the Fluxys website.

The following *snippet* gives an impression of how the XML looks like:

```
<GasAnalysisOnMeteringLinePublication DataPublicationType="GasAnalysisOnMeteringLine"
GenerationDateTime="2012-06-05T13:16:35" Diagnostic="NoError" GcvUnit="kWh/m³" NcvUnit="kWh/m³"
DensityUnit="kg/m³" WobbeUnit="kWh/m³" EmissionFactorUnit="t/TJ"
xmlns="http://extranet.fluxys.net/namespace/dps/GasAnalysisOnMeteringLine">
  <MeteringLine DeliveryPoint="20210" CodificationNumber="20210/A/1">
    <GasAnalysis GcvGas="11.32972" Ncv="10.22694" Density="0.77488" CO2EF="56.64696"
      Kref="0.89424" N2="1.36660" CO2="0.89173" C1="92.50175" C2="4.58494"
      C3="0.42040" IC4="0.13337" NC4="0.06081" IC5="0.02608" NC5="0.01429"
      C5P="0.00000" O2="0.00002" He="0.00000" Wobbe="14.63481"
      ValidationStatus="Raw">
      <MeasurementDate MeasuredGasDay="2012-04-01" MeasuredGasDayHour="1"
MeasuredDateTime="2012-04-01T04:00:00"/>
      </GasAnalysis>
      <GasAnalysis GcvGas="11.30667" Ncv="10.20566" Density="0.77394" CO2EF="56.64696"
        Kref="0.89473" N2="1.45458" CO2="0.85833" C1="92.61807" C2="4.43636"
        C3="0.40587" IC4="0.12895" NC4="0.05875" IC5="0.02523" NC5="0.01384"
        C5P="0.00000" O2="0.00002" He="0.00000" Wobbe="14.61669"
        ValidationStatus="Raw">
        <MeasurementDate MeasuredGasDay="2012-04-01" MeasuredGasDayHour="2"
MeasuredDateTime="2012-04-01T05:00:00"/>
      </GasAnalysis>
    </MeteringLine>
  </GasAnalysisOnMeteringLinePublication>
```

### 2.4.4 CSV format

The full CSV *sample*, containing data for HourlyGasAnalysisOnMeteringLine can be found in the CSV folder on the Fluxys website.

The following *snippet* gives an impression of how the CSV file looks like:

LineDeliveryPoint,LineCodificationNumber,GasAnalysisGcvGas,GcvUnit,GasAnalysisNcv,NcvUnit,GasAnalysisDensity,DensityUnit,GasAnalysisWobbe,WobbeUnit,GasAnalysisCO2EF,GasAnalysisCO2EFUnit,GasAnalysisKref,GasAnalysisElementsUnit,GasAnalysisN2,GasAnalysisCO2,GasAnalysisC1,GasAnalysisC2,GasAnalysisC3,GasAnalysisIC4,GasAnalysisNC4,GasAnalysisIC5,GasAnalysisNC5,GasAnalysisC5P,GasAnalysisO2,GasAnalysisHe,GasAnalysisValidationStatus,GasAnalysisMeasurementDateGasDay,GasAnalysisMeasurementDateGasDayHour,GasAnalysisMeasurementDateMeasuredDate
20210,20210-
N01,0,kWh/m³,0,kWh/m³,0,kg/m³,14.8662005702472222222222223,kWh/m³,0,t/TJ,0,mol%,0,0,0,0,0,0,0,0,0,0,0,
NoData,2020-01-01,1,2020-01-01 05:00:00
20210,20210-
N01,0,kWh/m³,0,kWh/m³,0,kg/m³,14.917066597905555555555557,kWh/m³,0,t/TJ,0,mol%,0,0,0,0,0,0,0,0,0,0,0,
NoData,2020-01-01,2,2020-01-01 06:00:00
20210,20210-
N01,0,kWh/m³,0,kWh/m³,0,kg/m³,14.926924051288888888888890,kWh/m³,0,t/TJ,0,mol%,0,0,0,0,0,0,0,0,0,0,0,
NoData,2020-01-01,3,2020-01-01 07:00:00
...

The following URL can be used to download a publication with the hourly gas analysis on all the metering lines for which the customer has view rights during July 2016. The returned file is in XML format.

- HourlyGasAnalysisOnNode

<https://api.gasdata.fluxys.com/StorageHandler/reports/WebTrack/gasanalysis/meteringline/new/hourly/get?periodfrom=2016-07-01&periodto=2016-07-31>

- DailyGasAnalysisOnNode

<https://api.gasdata.fluxys.com/StorageHandler/reports/WebTrack/gasanalysis/meteringline/new/daily/get?periodfrom=2018-07-01&periodto=2018-07-31>

## 2.5 NodeTopology

### 2.5.1 Description

This data publication contains information about all the nodes (and underlying metering lines) on which the customer has view rights.

This publication is returned for the following DataPublicationType:

- *NodeTopology*  
All the nodes on which the customer has or had view rights are returned with their metering lines.

Relative URL: </WebTrack/nodetopology/get>

### 2.5.2 Parameters

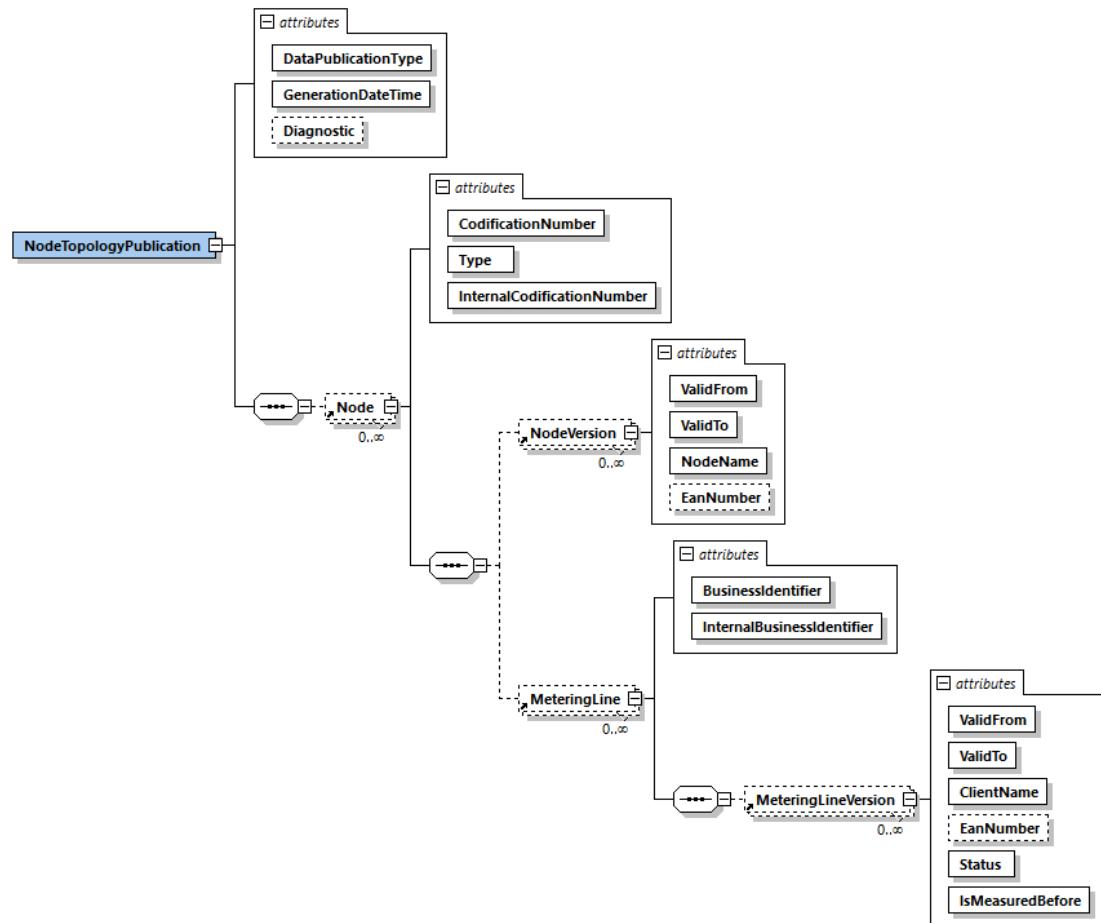
#### 2.5.2.1 Format types available

The format types are filled in the header of the http request

- CSV : “text/csv”
- XML : “text/xml”

### 2.5.3 XML format

#### 2.5.3.1 XSD



The connection status of the topology element (node or metering line)

InOperation	The topology element is connected to the grid and operationally functional.
Closed	The topology element is connected to the grid but not operationally functional.
Disconnected	The topology element is disconnected from the grid.

### 2.5.3.2 XML snippet

The full XML *sample* can be found in the XML folder on the Fluxys website.

The following *snippet* gives an impression of how the XML looks like:

```
<NodeTopologyPublication DataPublicationType="NodeTopology" GenerationDateTime="2012-06-04T11:45:32"
Diagnostic="NoError" xmlns="http://extranet.fluxys.net/namespace/dps/NodeTopology">
  <Node CodificationNumber="20210" InternalCodificationNumber="20210-N01"
Type="BorderNode">
    <NodeVersion ValidFrom="1985-07-01" ValidTo="2004-12-31"
      NodeName="DZ.LOENHOUT" EanNumber="" />
    <NodeVersion ValidFrom="2005-01-01" ValidTo="2005-12-31"
      NodeName="FLUXYS LOENHOUT" EanNumber="" />
    <NodeVersion ValidFrom="2006-01-01" ValidTo="9999-12-31"
      NodeName="Fluxys Loenhout Storage" EanNumber="" />
    <MeteringLine BusinessIdentifier="20210/0" InternalBusinessIdentifier="20210-N01">
      <MeteringLineVersion ValidFrom="1985-07-01" ValidTo="2004-12-31" ClientName=""
        EanNumber="" Status="InOperation" IsMeasuredBefore="false" />
      <MeteringLineVersion ValidFrom="2005-01-01" ValidTo="2005-12-31" ClientName=""
        EanNumber="" Status="InOperation" IsMeasuredBefore="false" />
      <MeteringLineVersion ValidFrom="2006-01-01" ValidTo="9999-12-31" ClientName=""
        EanNumber="" Status="InOperation" IsMeasuredBefore="false" />
    </MeteringLine>
  </Node>
</NodeTopologyPublication>
```

### 2.5.4 CSV format

The full CSV *sample* can be found in the CSV folder on the Fluxys website.

The following *snippet* gives an impression of how the CSV file looks like:

```
NodeCodificationNumber,NodeInternalCodificationNumber,NodeType,NodeVersionName,NodeVersionEanNumber,
NodeVersionValidFrom,NodeVersionValidTo,LineBusinessIdentifier,LineInternalBusinessIdentifier,LineVersionValidF
rom,LineVersionValidTo,LineVersionClientName,LineVersionEanNumber,LineVersionStatus,LineVersionIsMeasured
Before
20210,20210-N01,BorderNode,DZ.LOENHOUT,,1985-07-01,2004-12-31,20210/0,20210-N01,1985-07-01,2004-12-
31,,,InOperation,No
20210,20210-N01,BorderNode,DZ.LOENHOUT,,1985-07-01,2004-12-31,20210/0,20210-N01,2005-01-01,2005-12-
31,,,InOperation,No
20210,20210-N01,BorderNode,DZ.LOENHOUT,,1985-07-01,2004-12-31,20210/0,20210-N01,2006-01-01,9999-12-
31,,,InOperation,No
...
```

### 2.5.5 Example URL

The following URL can be used to download the topology of all the nodes on which the user has view rights.

<https://api.gasdata.fluxys.com/StorageHandler/Reports/WebTrack/nodetopology/get>

## 2.6 GasExchangeLocationTopology

### 2.6.1 Description

This data publication contains information about all the gas exchange locations on which the customer has view rights. For each gas exchange location the node memberships with their relative weights are listed.

This publication is returned for the following DataPublicationType:

- *GasExchangeLocationTopology*

All the gas exchange locations on which the customer has or had view rights are returned with their memberships. Only nodes can be members of a gas exchange location.

Relative URL : /WebTrack/geltopology/get

### 2.6.2 Parameters

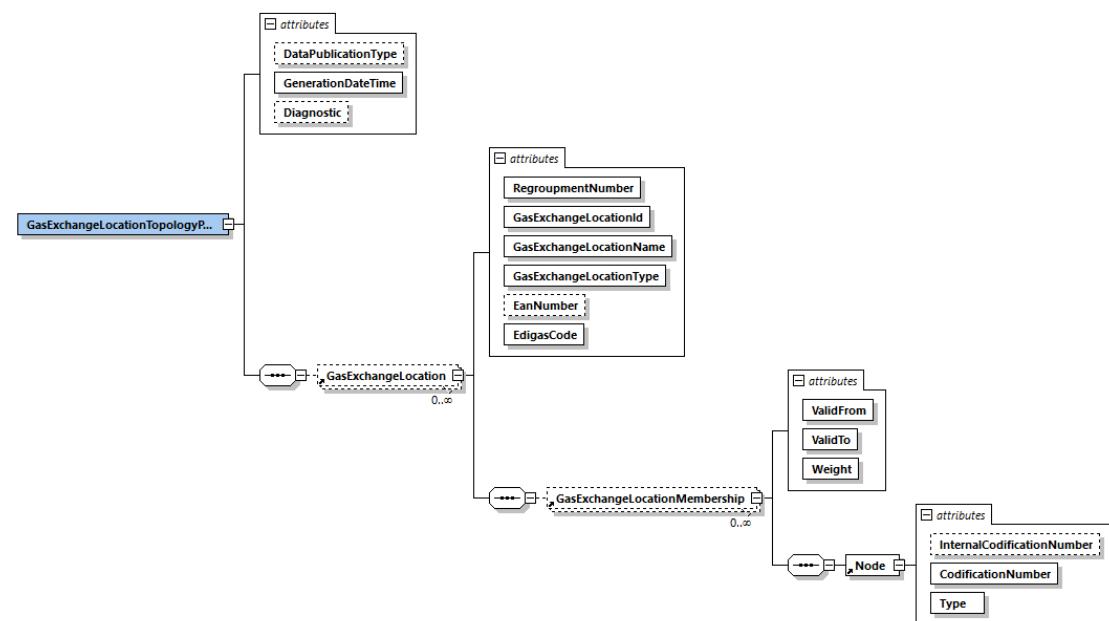
#### 2.6.2.1 Format types available

The format types are filled in the header of the http request

- CSV : “text/csv”
- XML : “text/xml”

### 2.6.3 XML format

#### 2.6.3.1 XSD



The connection status of the topology element (node or metering line)

InOperation	The topology element is connected to the grid and operationally functional.
Closed	The topology element is connected to the grid but not operationally functional.
Disconnected	The topology element is disconnected from the grid.

### 2.6.3.2 XML snippet

The full XML *sample* can be found in the XML folder on the Fluxys website.

The following *snippet* gives an impression of how the XML looks like:

```
<GasExchangeLocationTopologyPublication DataPublicationType="GasExchangeLocationTopology"
GenerationDateTime="2012-06-04T11:36:37" Diagnostic="NoError"
xmlns="http://extranet.fluxys.net/namespace/dps/GasExchangeLocationTopology">
  <GasExchangeLocation RegroupmentNumber="5746" GasExchangeLocationId="2"
    GasExchangeLocationName="LHT Flange" GasExchangeLocationType="BorderPoint"
    EanNumber="" EdigasCode="005746">
    <GasExchangeLocationMembership ValidFrom="2005-10-01T04:00:00"
      ValidTo="9999-12-31T04:59:59" Weight="1.00000">
      <Node CodificationNumber="20210" InternalCodificationNumber="20210-N01"
        Type="BorderNode" />
    </GasExchangeLocationMembership>
  </GasExchangeLocation>
  <GasExchangeLocation RegroupmentNumber="5952" GasExchangeLocationId="1"
    GasExchangeLocationName="LHT Wellhead" GasExchangeLocationType="StoragePoint"
    EanNumber="" EdigasCode="LHTWHD">
    <GasExchangeLocationMembership ValidFrom="2008-01-01T05:00:00"
      ValidTo="9999-12-31T04:59:59" Weight="1.00000">
      <Node CodificationNumber="20210" InternalCodificationNumber="20210-N01"
        Type="BorderNode" />
    </GasExchangeLocationMembership>
  </GasExchangeLocation>
  <GasExchangeLocation RegroupmentNumber="4901" GasExchangeLocationId="6"
    GasExchangeLocationName="PSP Flange" GasExchangeLocationType="BorderPoint"
    EanNumber="" EdigasCode="004901">
    <GasExchangeLocationMembership ValidFrom="2001-01-01T05:00:00"
      ValidTo="2011-02-01T04:59:59" Weight="-1.00000">
      <Node CodificationNumber="47510" Type="BorderNode" />
    </GasExchangeLocationMembership>
  </GasExchangeLocation>
</GasExchangeLocationTopologyPublication>
```

### 2.6.4 CSV format

The full CSV *sample* can be found in the CSV folder on the Fluxys website.

The following *snippet* gives an impression of how the CSV file looks like:

GasExchangeLocationRegroupmentNumber, GasExchangeLocationId, GasExchangeLocationName, GasExchangeLocationType, GasExchangeLocationEanNumber, GasExchangeLocationEdigasCode, GasExchangeLocationMembershipValidFrom, GasExchangeLocationMembershipValidTo, GasExchangeLocationMembershipWeight, NodeCodificationNumber, NodeInternalCodificationNumber, NodeType
5745,2,LHT Flange,,,005746,2005-10-01 04:00:00,9999-12-31 04:59:59,1,20210,20210-N01,BorderNode
5953,1,LHT Wellhead,,,LHTWHD,2008-01-01 05:00:00,9999-12-31 04:59:59,1,20210,20210-N01,BorderNode
...

### 2.6.5 Example URL

The following URL can be used to download the topology of all the Gas Exchange Locations on which the user has view rights.

<https://api.gasdata.fluxys.com/StorageHandler/reports/WebTrack/geltopology/get>

## **2.7 Provisional Hourly Allocation**

### **2.7.1 Description**

The provisional hourly allocation describes the allocations based on the hourly measurements, or replacement values in case no measurements are available. These values are expressed in kWh/h.

In normal circumstances the provisional hourly allocations are available within the first half hour following the allocated hour.

Relative URL: </WebTrack/provisionalhourlyallocation/get>

### **2.7.2 Remarks**

Fluxys introduced the unbalanced model for its storage services on July 1st, 2014. As of that date, allocations are calculated for interconnection points, while before that date allocations were calculated on routes.

### **2.7.3 Parameters**

#### **2.7.3.1 *periodfrom – periodto***

This is the period for which data is retrieved.

Dates are expressed in the YYYY-MM-DD format.

The chosen period can span the go-live date, resulting in a report which contains both routes and connection points.

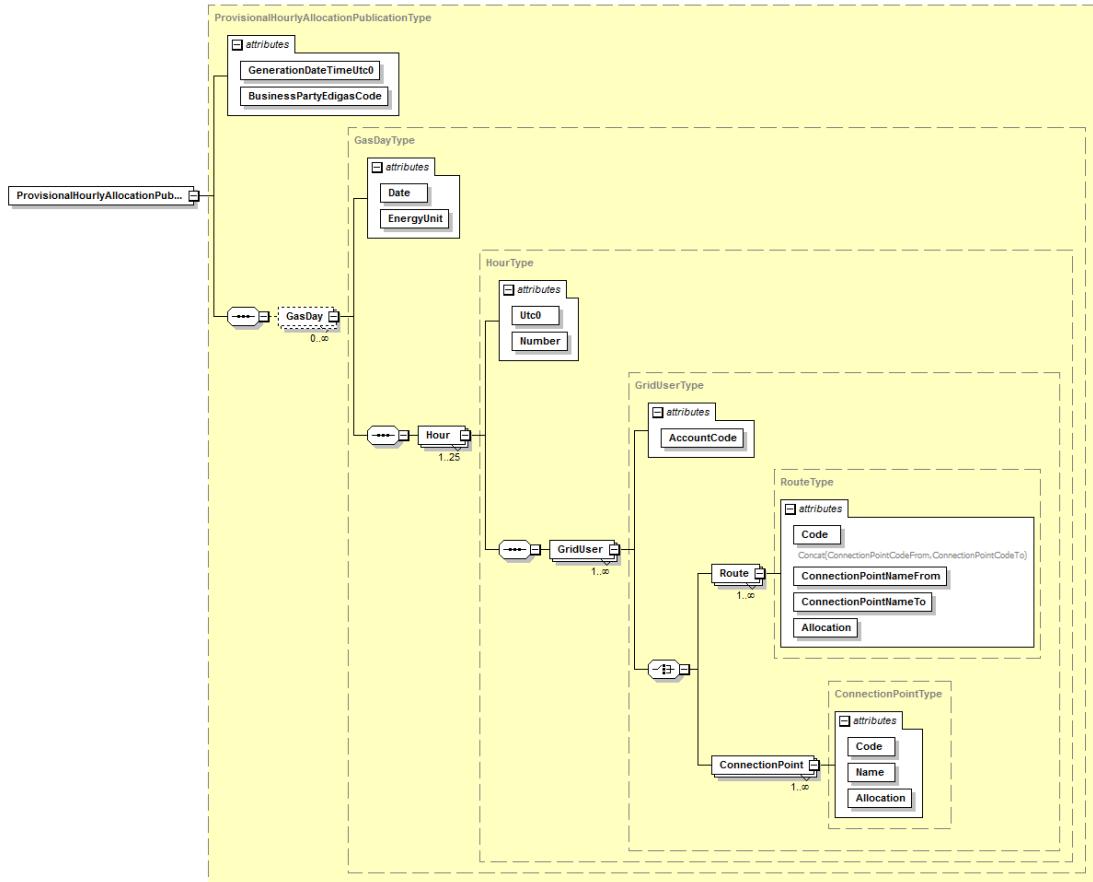
#### **2.7.3.2 *Format types available***

The format types are filled in the header of the http request

- CSV : “text/csv”
- XML : “text/xml”

## 2.7.4 XML format

### 2.7.4.1 XSD



## 2.7.5 Examples

The following HTTP GET request can be used to retrieve the provisional allocations in XML format for October 1<sup>st</sup>, 2016:

<https://api.gasdata.fluxys.com/StorageHandler/reports/WebTrack/provisionalhourlyallocation/get?periodfrom=2016-10-01&periodto=2016-10-01>

Example files in XML or CSV are available in the Implementation Information documentation under Samples > Storage > XML Examples or Samples > Storage > CSV Examples.

## 2.8 Gas In Storage

### 2.8.1 Description

The GIS report allows shippers to keep track of the amount of energy they have in storage in the Fluxys storage installations.

Relative URL ( with the Api Getaway method) : /WebTrack/gasinstorage/get

### 2.8.2 Parameters

#### 2.8.2.1 *periodfrom – periodto*

This is the period for which data is retrieved.

Dates are expressed in the YYYY-MM-DD format.

If *periodto* is empty than the period is limited to the “period from” day

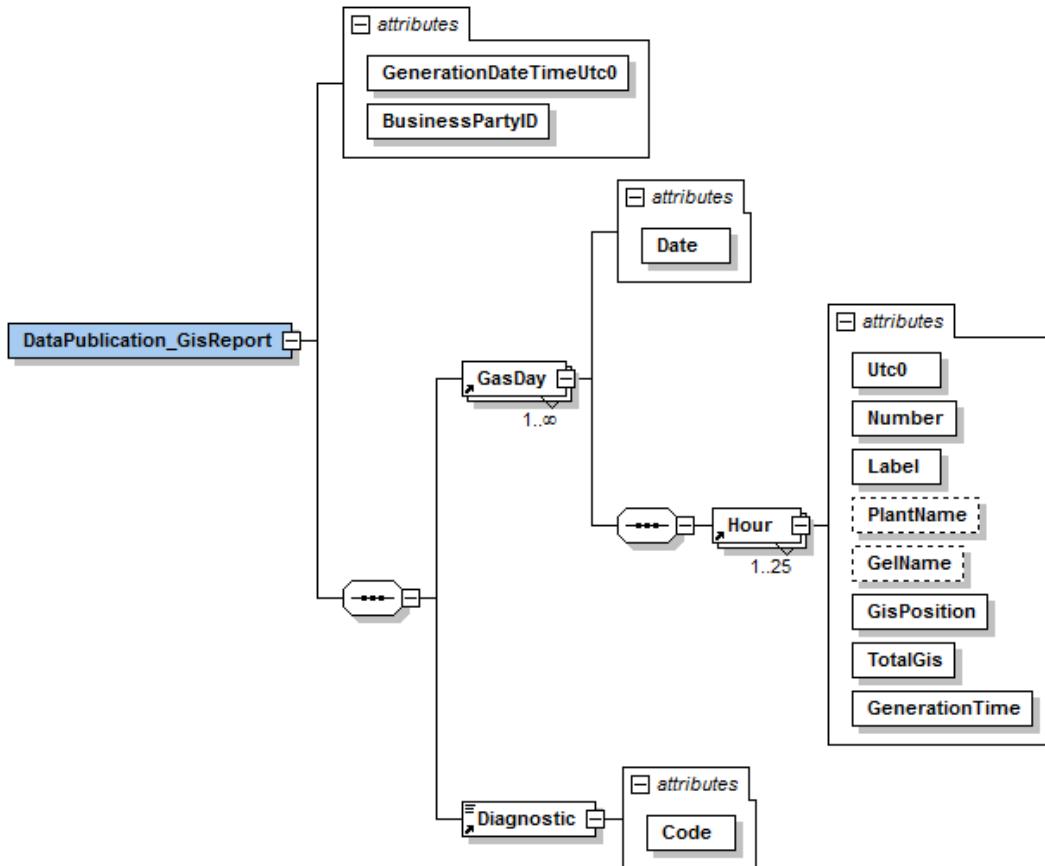
### 2.8.2.2 Format types available

The format types are filled in the header of the http request

- CSV : "text/csv"
- XML : "text/xml"

### 2.8.3 XML format

#### 2.8.3.1 XSD



#### 2.8.3.2 XML snippet

The full XML sample can be found in the XML folder on the Fluxys website.

The following *snippet* gives an impression of how the XML looks like:

```

<DataPublication_GisReport GenerationDateTimeUtc0="2012-05-31T08:53:42"
BusinessPartyID="GDFS" xmlns="http://webtrack.fluxys.net/namespace/dps/GisReport/1.1.0.0">
  <GasDay Date="2012-03-01">
    <Hour Utc0="2012-03-01T05:00:00" Number="1" Label="06:00 - 07:00"
          PlantName="Loenhout" GelName="LHT Wellhead" GisPosition="709954361"
          TotalGis="3215494140" GenerationTime="2012-03-01T07:10:29"/>
    <Hour Utc0="2012-03-01T06:00:00" Number="2" Label="07:00 - 08:00"
          PlantName="Loenhout" GelName="LHT Wellhead" GisPosition="708865612"
          TotalGis="3214355141" GenerationTime="2012-03-01T08:10:50"/>
    <Hour Utc0="2012-03-01T07:00:00" Number="3" Label="08:00 - 09:00"
          PlantName="Loenhout" GelName="LHT Wellhead" GisPosition="707776862"
          TotalGis="3213216141" GenerationTime="2012-03-01T09:10:48"/>
    ...
  </GasDay>
  <GasDay Date="2012-03-02">
  ...
</DataPublication_GisReport>
  
```

```

<Hour Utc0="2012-03-02T05:00:00" Number="1" Label="06:00 - 07:00"
      PlantName="Loenhout" GelName="LHT Wellhead" GisPosition="683308270"
      TotalGis="3194811745" GenerationTime="2012-03-02T07:10:52"/>
<Hour Utc0="2012-03-02T06:00:00" Number="2" Label="07:00 - 08:00"
      PlantName="Loenhout" GelName="LHT Wellhead" GisPosition="682219520"
      TotalGis="3193521995" GenerationTime="2012-03-02T08:10:45"/>
<Hour Utc0="2012-03-02T07:00:00" Number="3" Label="08:00 - 09:00"
      PlantName="Loenhout" GelName="LHT Wellhead" GisPosition="680913020"
      TotalGis="3192014495" GenerationTime="2012-03-02T09:10:37"/>
...
</GasDay>
...
<Diagnostic Code="0"/>
</DataPublication_GisReport>

```

## 2.8.4 CSV format

The full CSV *sample* can be found in the CSV folder on the Fluxys website.

The following *snippet* gives an impression of how the CSV file looks like:

```

GasHourTimeUtc0, GasDay, GasHour, GasHourNumberLabel, PlantName, GelName, GisPosition, TotalGis, GenerationTi
me
12/05/2022 04:00:00, 12/05/2022, 1, 06:00 - 07:00, Loenhout, LHT Wellhead, -1097, 1385302352, 12/05/2022 07:10:32
12/05/2022 05:00:00, 12/05/2022, 2, 07:00 - 08:00, Loenhout, LHT Wellhead, -1097, 1385302352, 12/05/2022 08:10:38
12/05/2022 06:00:00, 12/05/2022, 3, 08:00 - 09:00, Loenhout, LHT Wellhead, -1097, 1385302352, 12/05/2022 10:10:45
12/05/2022 07:00:00, 12/05/2022, 4, 09:00 - 10:00, Loenhout, LHT Wellhead, -1097, 1385302352, 12/05/2022 10:10:49
...

```

Get the last available ‘Gas In Storage report’.

<https://api.gasdata.fluxys.com/StorageHandler/reports/WebTrack/gasinstorage/get>

## 2.9 Allocation details

### 2.9.1 Description

The download URL could be used by a client application for automatically downloading a collection of allocation details linked to a given document date or related to a particular Monthly Details Version Number (formerly: SAPExportVersionNumber).

It is also possible to download a single allocation detail automatically.

Remark: allocation details were formerly known as invoice annexes. You will still find references to the old name in some occasions like report codes.

Relative URL : </WebTrack/invanx/get>

### 2.9.2 Parameters

#### 2.9.2.1 *invoicedate*

The Allocation Details Invoicing Date (Document Date). The date must be formatted using the format YYYYMMDD.

**Example:** 2005-11-15 (invoicing date is 15/11/2005)

The parameter is only allowed for requesting validated allocation details in zip file.

#### 2.9.2.2 *sapversion*

The Monthly Details Version Number (formerly SAP Export Version Number). The format for the version number is YYYYMMVVV, with:

- YYYYMM: supply year and month

- VVVV version number

**Example:** 2005090003

The parameter is not allowed when requesting validated allocation details in zip file.

#### **2.9.2.3 annextype**

The Annex Type Code (Allocation Details Report Type Code). The parameter is mandatory if an individual report is requested. It should not be used if the allocation details in general are required. The following values are available:

- **DP105:** ValidatedGISAccount
- **DP106:** ValidatedAllocations

#### **2.9.2.4 Format types available**

The format types are filled in the header of the http request

- CSV : “text/csv”
- CSVZIP : “application/octet-stream”

CSV: only to download individual report

CSVzip: in all other cases

This parameter is always mandatory.

### **2.9.3 Examples**

The following HTTP GET request can be used to retrieve the validated allocations compressed in ZIP format for the date of April 27, 2016:

<https://api.gasdata.fluxys.com/StorageHandler/reports/WebTrack/invanx/get?invoicedate=2016-04-27>

The following request can be used to retrieve the ValidatedGisAccount in CSV format:

<https://api.gasdata.fluxys.com/StorageHandler/reports/WebTrack/invanx/get?sapversion=2012030001&annextype=DP105>

Example files in XML or CSV format are available in the Implementation Information documentation under Samples > Storage > XML Examples or Samples > Storage > CSV Examples.

### 3. Reports via basic authentication method

The following reports are only available through the basic authentication method : the credentials need to be inserted into the URL.

The format of the URL is

[https://gasdata.fluxys.com/ExtranetStorage/Download.aspx?\[AuthenticationParameters\]\[OtherParameters\]](https://gasdata.fluxys.com/ExtranetStorage/Download.aspx?[AuthenticationParameters][OtherParameters])

The affected reports are related to the capacities, capacity rights, indicators or seasonal programs for the storage plant Loenhout.

Information is only available in XML format.

#### 3.1 Capacity Rights

##### 3.1.1 Description

Download the subscribed

- Injection Rights
- Withdrawal Rights
- Storage Rights

depending on the selected capacity type and for a selected plant and selected period.

Injection and withdrawal Rights capacities are expressed in kWh/h.

Storage Rights capacities are expressed in MWh.

##### 3.1.2 Parameters

###### 3.1.2.1 Usr

The user account of the Automatic Download Agent user

###### 3.1.2.2 Pwd

The password of the Automatic Download Agent user

###### 3.1.2.3 Plant

The only plant type that can be requested is L for Loenhout.

###### 3.1.2.4 Type

Capacities

###### 3.1.2.5 CapType

- Injection
- Withdrawal
- Storage

###### 3.1.2.6 Start – End

This is the period for which data is retrieved.

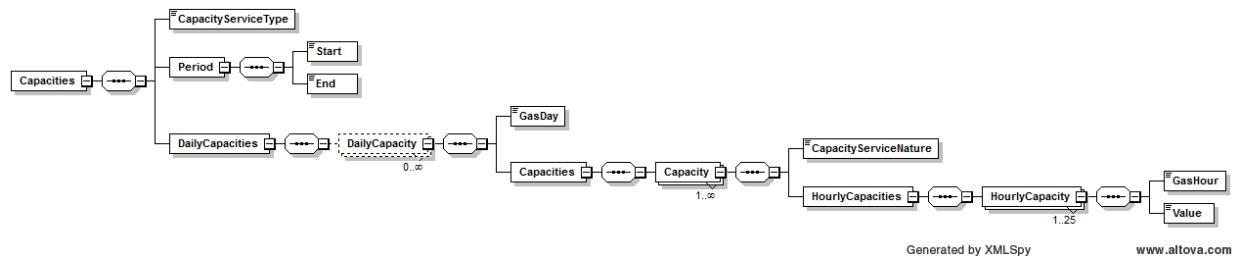
The date format is YYYY-MM-DD.

Start must be a day in current year and End must be a day  $\geq$  Start and in either the current or next year.

**NB :** The start date must be later than 01/04/2022.

### 3.1.3 XML format

#### 3.1.3.1 XSD



#### 3.1.3.2 XML snippet

The full XML *sample*, containing data for the subscribed injection rights for 2 days at the Loenhout plant, can be found in the XML folder on the Fluxys website.

The following *snippet* gives an impression of how the XML looks like:

```

<Capacities xmlns="http://www.fluxys.net/Capacities">
  <CapacityServiceType>Injection</CapacityServiceType>
  <Period>
    <Start>2022-04-15</Start>
    <End>2022-04-16</End>
  </Period>
  <DailyCapacities>
    <DailyCapacity>
      <GasDay>2022-04-15</GasDay>
      <Capacities>
        <Capacity>
          <CapacityServiceNature>PriorityBooster</CapacityServiceNature>
          <HourlyCapacities>
            <HourlyCapacity>
              <GasHour>1</GasHour>
              <Value>49466</Value>
            </HourlyCapacity>
            <HourlyCapacity>
              <GasHour>2</GasHour>
              <Value>49466</Value>
            </HourlyCapacity>
            ...
          </HourlyCapacities>
        </Capacity>
        <Capacity>
          <CapacityServiceNature>Additional</CapacityServiceNature>
          <HourlyCapacities>
            <HourlyCapacity>
              <GasHour>1</GasHour>
              <Value>0</Value>
            </HourlyCapacity>
            <HourlyCapacity>
              <GasHour>2</GasHour>
              <Value>0</Value>
            </HourlyCapacity>
            ...
          </HourlyCapacities>
        </Capacity>
        ...
      </Capacities>
    </DailyCapacity>
    ...
  </DailyCapacities>
</Capacities>
```

### 3.1.4 Example URL

The following URL can be used to download the subscribed injection rights for 2 days at the Loenhout plant.

<https://gasdata.fluxys.com/ExtranetStorage/Download.aspx?Usr=User&Pwd=Password&plant=L&type=Capacities&captype=Injection&start=2022-04-15&end=2022-04-16>

## 3.2 Real Capacity Rights

### 3.2.1 Description

Download the real

- Injection Rights
- Withdrawal Rights
- Storage Rights

depending on the selected capacity type and for a selected plant and selected period.

### 3.2.2 Parameters

#### 3.2.2.1 *Usr*

The user account of the Automatic Download Agent user

#### 3.2.2.2 *Pwd*

The password of the Automatic Download Agent user

#### 3.2.2.3 *Plant*

The only plant type that can be requested is L for Loenhout.

#### 3.2.2.4 *Type*

RealCapacities

#### 3.2.2.5 *CapType*

- Injection
- Withdrawal
- Storage

#### 3.2.2.6 *Start – End*

This is the period for which data is retrieved.

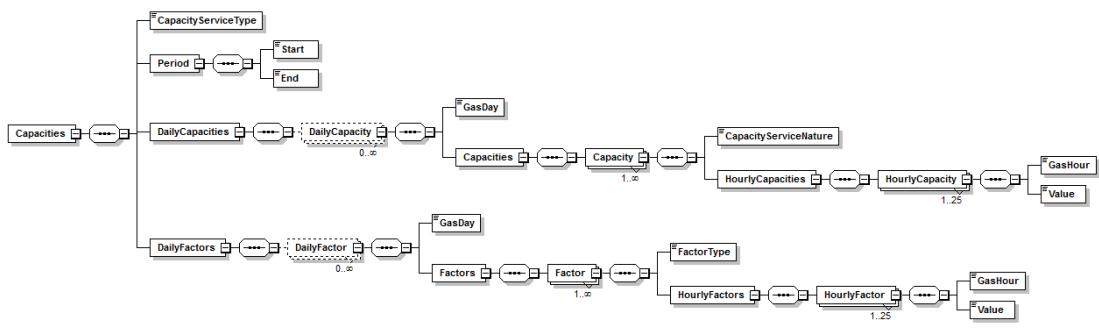
The date format is YYYY-MM-DD.

Start must be a day in current year and End must be a day >= Start and in either the current or next year.

**NB :** The start date must be later than 01/04/2022.

### 3.2.3 XML format

#### 3.2.3.1 XSD



### 3.2.3.2 XML snippet

The full XML *sample*, containing data for the real injection rights for 2 days at the Loenhout plant, can be found in the XML folder on the Fluxys website.

The following *snippet* gives an impression of how the XML looks like:

```
<Capacities xmlns="http://www.fluxys.net/Capacities">
  <CapacityType>Injection</CapacityType>
  <Period>
    <Start>2022-04-15</Start>
    <End>2022-04-16</End>
  </Period>
  <DailyCapacities>
    <DailyCapacity>
      <GasDay>16/04/2022 00:00:00</GasDay>
      <Capacities>
        <Capacity>
          <CapacityServiceType>Firm</CapacityServiceType>
          <HourlyCapacities>
            <HourlyCapacity>
              <GasHour>24</GasHour>
              <Value>173631</Value>
            </HourlyCapacity>
            <HourlyCapacity>
              <GasHour>23</GasHour>
              <Value>173631</Value>
            </HourlyCapacity>
            ...
          </HourlyCapacities>
        </Capacity>
        <Capacity>
          <CapacityServiceType>BoosterCapacity</CapacityServiceType>
          <HourlyCapacities>
            <HourlyCapacity>
              <GasHour>24</GasHour>
              <Value>49466</Value>
            </HourlyCapacity>
            <HourlyCapacity>
              <GasHour>23</GasHour>
              <Value>49466</Value>
            </HourlyCapacity>
            ...
          </HourlyCapacities>
        </Capacity>
        ...
      </Capacities>
    </DailyCapacity>
    <DailyCapacity>
      <GasDay>15/04/2022 00:00:00</GasDay>
      <Capacities>
        ...
      </Capacities>
    </DailyCapacity>
  </DailyCapacities>
  <DailyFactors>
    <DailyFactor>
      <GasDay>16/04/2022 00:00:00</GasDay>
      <Factors>
        <Factor>
          <FactorType>GisExceedingFactor</FactorType>
          <HourlyFactors>
            <HourlyFactor>
              <GasHour>24</GasHour>
              <Value>0</Value>
            </HourlyFactor>
            <HourlyFactor>
              ...
            </HourlyFactor>
          </HourlyFactors>
        </Factor>
      </Factors>
    </DailyFactor>
  </DailyFactors>
</Capacities>
```

```

<GasHour>23</GasHour>
<Value>0</Value>
</HourlyFactor>
...
</HourlyFactors>
</Factor>
<Factor>
<FactorType>VolumeFactor</FactorType>
<HourlyFactors>
...
</HourlyFactors>
</Factor>
...
</Factors>
</DailyFactor>
<DailyFactor>
<GasDay>15/04/2022 00:00:00</GasDay>
<Factors>
...
</Factors>
</DailyFactor>
</DailyFactors>
</Capacities>

```

### 3.2.4 Example URL

The following URL can be used to download the real injection rights for 2 days at the Loenhout plant.

<https://gasdata.fluxys.com/ExtranetStorage/Download.aspx?Usr=User&Pwd=Password&plant=L&type=RealCapacities&captyle=Injection&start=2022-04-15&end=2022-04-16>

## 3.3 Gas in Storage forecast

### 3.3.1 Description

Download the GIS report for the Loenhout plant for a selected period.

### 3.3.2 Parameters

#### 3.3.2.1 *Usr*

The user account of the Automatic Download Agent user

#### 3.3.2.2 *Pwd*

The password of the Automatic Download Agent user

#### 3.3.2.3 *Plant*

The only plant type that can be requested is L for Loenhout.

#### 3.3.2.4 *Type*

GIS

#### 3.3.2.5 *Start – End*

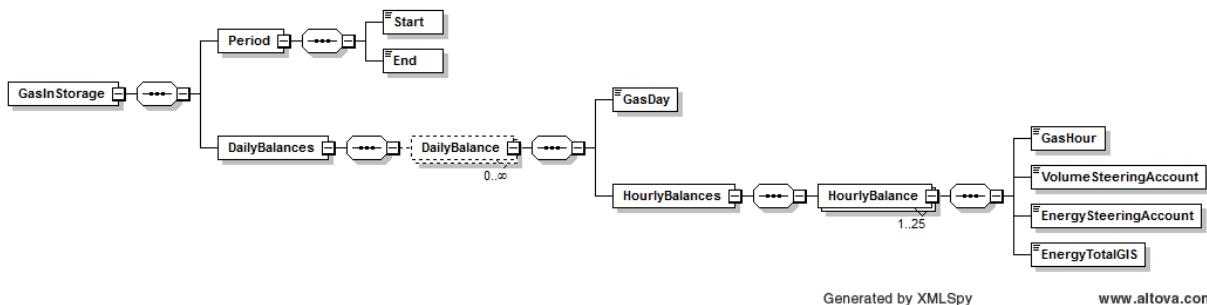
This is the period for which data is retrieved.

The date format is YYYY-MM-DD.

Start must be <= End and the range must be smaller than 31 days.

### 3.3.3 XML format

#### 3.3.3.1 XSD



Generated by XMLSpy

www.altova.com

#### 3.3.3.2 XML snippet

The full XML *sample*, containing data for the GIS for 2 gasdays at Loenhout, can be found in the XML folder on the Fluxys website.

The following *snippet* gives an impression of how the XML looks like:

```
<GasInStorage xmlns="http://www.fluxys.net/GasInStorage">
  <Period>
    <Start>2012-01-15</Start>
    <End>2012-01-16</End>
  </Period>
  <DailyBalances>
    <DailyBalance>
      <GasDay>2012-01-15</GasDay>
      <HourlyBalances>
        <HourlyBalance>
          <GasHour>1</GasHour>
          <VolumeSteeringAccount>163508525.68976975908886737144</VolumeSteeringAccount>
          <EnergySteeringAccount>1899620946.1054589263382182177</EnergySteeringAccount>
          <EnergyTotalGIS>13641723515.159672449527100372</EnergyTotalGIS>
        </HourlyBalance>
        <HourlyBalance>
          <GasHour>2</GasHour>
          <VolumeSteeringAccount>163344859.34725092932851917235</VolumeSteeringAccount>
          <EnergySteeringAccount>1898135140.0857089263382182177</EnergySteeringAccount>
          <EnergyTotalGIS>13643139764.562716451435483214</EnergyTotalGIS>
        </HourlyBalance>
      ...
      </HourlyBalances>
    </DailyBalance>
    ...
  </DailyBalances>
</GasInStorage>
```

### 3.3.4 Example URL

The following URL can be used to download the GIS for 2 gasdays at Loenhout.

<https://gasdata.fluxys.com/ExtranetStorage/Download.aspx?Usr=User&Pwd=Password&plant=L&type=GIS&start=2018-01-15&end=2018-01-16>

## 3.4 Indicators

### 3.4.1 Description

Download the Indicators report for the Loenhout plant and the selected period.

### 3.4.2 Parameters

#### 3.4.2.1 Usr

The user account of the Automatic Download Agent user

### 3.4.2.2 Pwd

The password of the Automatic Download Agent user

### 3.4.2.3 Plant

L

### 3.4.2.4 Type

Indicators

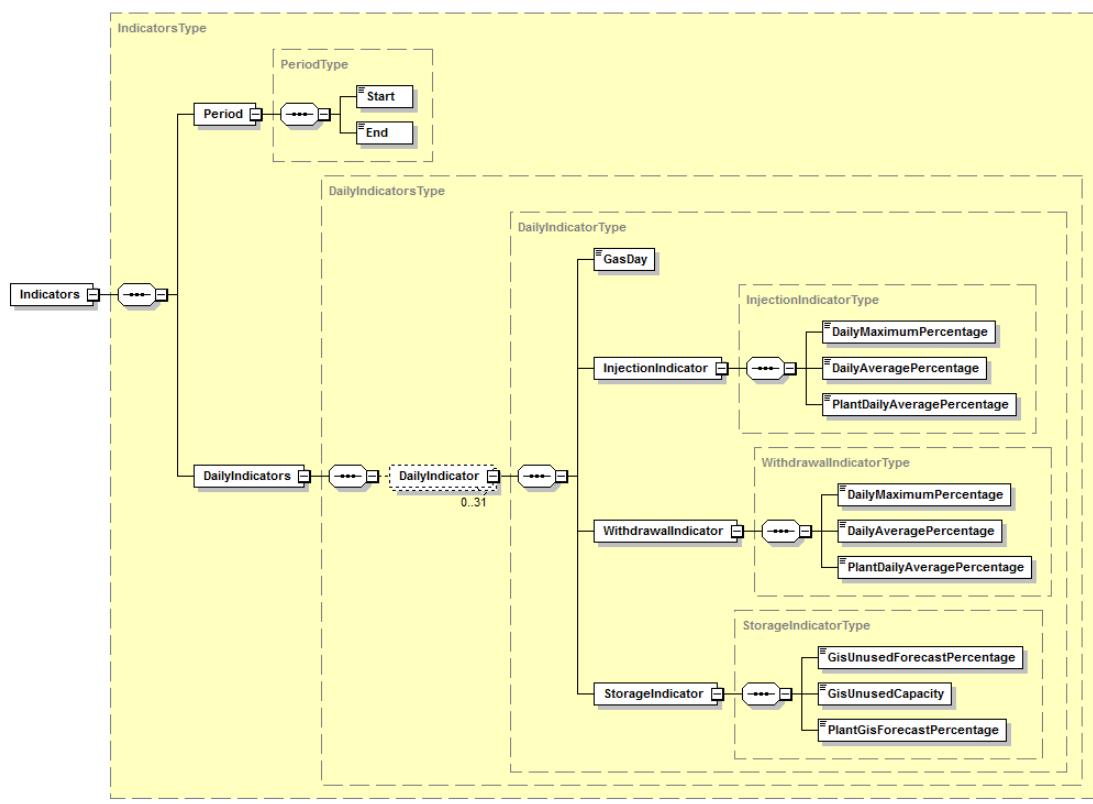
### 3.4.2.5 Start – End

This is the period for which data is retrieved.  
The date format is YYYY-MM-DD.

Start must be <= End and the range must be smaller than 31 days.

## 3.4.3 XML format

### 3.4.3.1 XSD



Generated by XMLSpy

[www.altova.com](http://www.altova.com)

### 3.4.3.2 XML snippet

The full XML sample, containing data for the Indicators at Loenhout for 2 gasdays, can be found in the XML folder on the Fluxys website.

The following *snippet* gives an impression of how the XML looks like:

```
<Indicators xmlns="http://www.fluxys.net/Indicators">
  <Period>
    <Start>2012-05-01</Start>
    <End>2012-05-02</End>
  </Period>
  <DailyIndicators>
    <DailyIndicator>
      <GasDay>2012-05-01</GasDay>
      <InjectionIndicator>
```

```

<DailyMaximumPercentage>0</DailyMaximumPercentage>
<DailyAveragePercentage>0</DailyAveragePercentage>
<PlantDailyAveragePercentage>45.7376464352592000</PlantDailyAveragePercentage>
</InjectionIndicator>
<WithdrawalIndicator>
<DailyMaximumPercentage>0</DailyMaximumPercentage>
<DailyAveragePercentage>0</DailyAveragePercentage>
<PlantDailyAveragePercentage>0</PlantDailyAveragePercentage>
</WithdrawalIndicator>
<StorageIndicator>
<GisUnusedForecastPercentage>90.00</GisUnusedForecastPercentage>
<GisUnusedCapacity>0</GisUnusedCapacity>
<PlantGisForecastPercentage>100</PlantGisForecastPercentage>
</StorageIndicator>
</DailyIndicator>
...
</DailyIndicators>
</Indicators>

```

### 3.4.4 Example URL

The following URL can be used to download the Indicators report at Loenhout for 2 gasdays.

<https://gasdata.fluxys.com/ExtranetStorage/Download.aspx?Usr=User&Pwd=Password&plant=L&type=Indicators&start=2018-05-01&end=2018-05-02>

## 3.5 Seasonal Program

### 3.5.1 Description

Download the Seasonal Program report for the Loenhout plant and the selected period.

### 3.5.2 Parameters

#### 3.5.2.1 *Usr*

The user account of the Automatic Download Agent user

#### 3.5.2.2 *Pwd*

The password of the Automatic Download Agent user

#### 3.5.2.3 *Plant*

L

#### 3.5.2.4 *Type*

SeasonalProgram

#### 3.5.2.5 *Start – End*

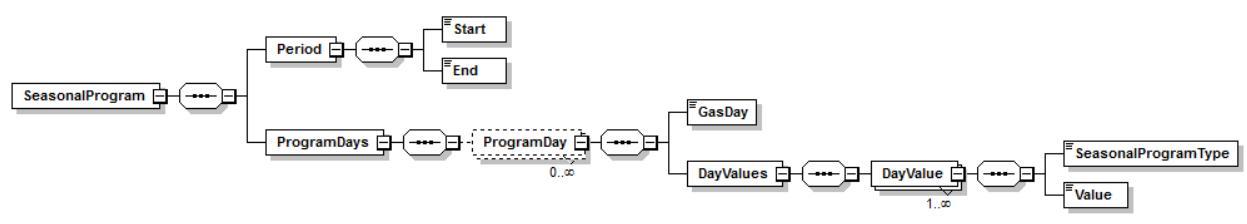
This is the period for which data is retrieved.

The date format is YYYY-MM-DD.

Start must be a day in current year and End must be a day >= Start and in either current or next year.

### 3.5.3 XML format

#### 3.5.3.1 XSD



Generated by XMLSpy

www.altova.com

### 3.5.3.2 XML snippet

The full XML *sample*, containing data for the Seasonal Program at Loenhout for 2 gasdays, can be found in the XML folder on the Fluxys website.

The following *snippet* gives an impression of how the XML looks like:

```
<SeasonalProgram xmlns="http://www.fluxys.net/SeasonalProgram">
<Period>
<Start>2012-01-01</Start>
<End>2012-01-02</End>
</Period>
<ProgramDays>
<ProgramDay>
<GasDay>2012-01-01</GasDay>
<DayValues>
<DayValue>
<SeasonalProgramType>Withdrawal</SeasonalProgramType>
<Value>30000000</Value>
</DayValue>
</DayValues>
</ProgramDay>
<ProgramDay>
<GasDay>2012-01-02</GasDay>
<DayValues>
<DayValue>
<SeasonalProgramType>Withdrawal</SeasonalProgramType>
<Value>30000000</Value>
</DayValue>
</DayValues>
</ProgramDay>
</ProgramDays>
</SeasonalProgram>
```

### 3.5.4 Example URL

The following URL can be used to download the Seasonal Program at Loenhout for 2 gasdays.

<https://gasdata.fluxys.com/ExtranetStorage/Download.aspx?Usr=User&Pwd=Password&plant=L&type=SeasonalProgram&start=2018-01-01&end=2018-01-02>

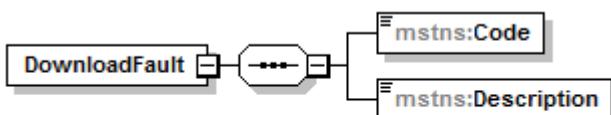
## 3.6 Error

### 3.6.1 Description

If no data is available, if there is an error with the date range or the format of if the parameter is not as expected, an error xml will be generated.

### 3.6.2 XML format

#### 3.6.2.1 XSD



Generated by XMLSpy

[www.altova.com](http://www.altova.com)

#### 3.6.2.2 XML snippet

```
<DownloadFault xmlns="http://www.fluxys.net/DownloadFault">
<Code>1</Code>
<Description>The parameter 'cotype' could not be parsed.</Description>
</DownloadFault>
```