# DOCUMENT

## General description

This document describes ArchestrA templates developed for the Process Data Management of RX59 project. It does not include ArchestrA Callisto library objects.  
Some templates have been adapted/modified from the ArchestrA Callisto Library, others have been totally developed. These new objects are in conformance with the Callisto methodology.

## User Defined

### User defined templates

#### Template ArchestrA $Bandeau

##### Description

GalaxyToolkit.DataTransferObjects.GalaxyAttribute

##### Derived from

$UserDefined

##### UDA's

Not Applicable

##### Field Attributes

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Field Attribute name | Data Type | IO Scaling | History | Limit Alarms | Rate Of Change Alarms | Target Deviation Alarms | Bad Value Alarm | Statistics |
| Anim | boolean |  |  |  |  |  |  |  |
| ACK | boolean |  |  |  |  |  |  |  |
| SynchDateHeure | boolean |  |  |  |  |  |  |  |
| FinDelestage | boolean |  |  |  |  |  |  |  |
| ACK\_GEN | boolean |  |  |  |  |  |  |  |
| AlarmeHeureHorsLimite | boolean |  |  |  |  |  |  |  |
| AlarmeFinPasIndique | boolean |  |  |  |  |  |  |  |
| MoisAutomate | integer |  |  |  |  |  |  |  |
| AnneeAutomate | integer |  |  |  |  |  |  |  |
| JourAutomate | integer |  |  |  |  |  |  |  |
| HeureAutomate | integer |  |  |  |  |  |  |  |
| MinuteAutomate | integer |  |  |  |  |  |  |  |
| SecondeAutomate | integer |  |  |  |  |  |  |  |
| TpsDelestage\_Heure | integer |  |  |  |  |  |  |  |
| TpsDelestage\_Minute | integer |  |  |  |  |  |  |  |
| TpsDelestage\_Seconde | integer |  |  |  |  |  |  |  |

##### Scripts

Not Applicable

#### Template ArchestrA $caIDF\_OEESettings

##### Description

GalaxyToolkit.DataTransferObjects.GalaxyAttribute

##### Derived from

$cmIDF\_Config

##### UDA's

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| UDA name | Data Type | IO | I | O | A | H |
| P.TimeToLogAvailability | integer |  |  |  |  |  |
| P.TimeToLogDownTime | integer |  |  |  |  |  |
| P.TimeToLogProdCount | integer |  |  |  |  |  |

##### Field Attributes

Not Applicable

##### Scripts

Not Applicable

#### Template ArchestrA $caIDF\_SQLConnectionString

##### Description

GalaxyToolkit.DataTransferObjects.GalaxyAttribute

##### Derived from

$cmIDF\_Config

##### UDA's

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| UDA name | Data Type | IO | I | O | A | H |
| cfg\_ConnectionString | string |  |  |  |  |  |
| obp\_ConnectionState | string |  |  |  |  |  |
| obp\_Database | string |  |  |  |  |  |
| obp\_DisplaySettings | string |  |  |  |  |  |
| obp\_Environment | string |  |  |  |  |  |
| obp\_ErrorMessage | string |  |  |  |  |  |
| obp\_ErrorState | boolean |  |  |  |  |  |
| obp\_ErrorTimeSec | integer |  |  |  |  |  |
| obp\_Server | string |  |  |  |  |  |

##### Field Attributes

Not Applicable

##### Scripts

TestConnection

|  |  |
| --- | --- |
| Name | TestConnection |
| Description |  |
| Trigger | Periodic of |

**Declarations :**

Dim spProcessor AS Indeff\_MES.DatabaseAccess.SpProcessor;  
Dim con AS System.Data.SqlClient.SqlConnection;  
Dim counter AS Integer;

**Script :**

{\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
-- Purpose : Tests the connectionstring.  
-- Author : Stijn Van Uytfanghe (Indeff)  
-- Version : 0.1  
-- Date : 2008-11-05  
-- History : 0.1 SUYT - INDEFF 2008-11-05 Original Version  
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*}  
  
spProcessor = new Indeff\_MES.DatabaseAccess.SpProcessor("DUMMY", me.Cfg\_ConnectionString);  
  
IF spProcessor.CheckConnection() == false THEN  
 'no connection  
 me.obp\_ConnectionState = "ERROR";  
 me.obp\_ErrorState = True;  
 me.obp\_ErrorMessage = spProcessor.Error.ErrorMessage;  
 me.obp\_ErrorTimeSec = me.obp\_ErrorTimeSec + 1;  
 LogMessage("DATABASE CONNECTION ERROR: " + me.obp\_ErrorMessage);  
  
ELSE  
 'connection ok  
 me.obp\_ConnectionState = "OK";  
 me.obp\_ErrorMessage = "Database connection OK";  
 me.obp\_ErrorState = False;  
 me.obp\_ErrorTimeSec = 0;  
  
 'use counter to log a message eacht 60 seconds  
 counter = counter + 1;  
 IF counter == 60 THEN  
 counter = 0;  
 LogMessage("DATABASE CONNECTION OK");  
 ENDIF;  
ENDIF;  
  
spProcessor.Dispose();  
  
  
'copy connectionstring settings to UDA's  
con = new System.Data.SqlClient.SqlConnection(me.Cfg\_ConnectionString);  
me.obp\_Server = con.DataSource;  
me.obp\_Database = con.Database;  
  
IF me.obp\_Server == "NLABLNAB005.NAB.local" OR me.obp\_Server == "10.60.109.5" THEN  
 me.obp\_Environment = "LIVE";  
ELSEIF me.obp\_Server == "NLABLNAB006.NAB.local" OR me.obp\_Server == "10.60.109.6" THEN  
 me.obp\_environment = "DEVELOPMENT";  
ELSE  
 me.obp\_environment = "UNKNOWN";  
ENDIF;

#### Template ArchestrA $Chaux\_10\_50

##### Description

GalaxyToolkit.DataTransferObjects.GalaxyAttribute

##### Derived from

$dwProduits

##### UDA's

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| UDA name | Data Type | IO | I | O | A | H |
| AL2O3 | float |  |  |  |  | X |
| CAO | float |  |  |  |  | X |
| CO2 | float |  |  |  |  | X |
| FE2O3 | float |  |  |  |  | X |
| MGO | float |  |  |  |  | X |
| R\_R | float |  |  |  |  | X |
| S | float |  |  |  |  | X |
| SIO2 | float |  |  |  |  | X |
| T60 | float |  |  |  |  | X |

##### Field Attributes

Not Applicable

##### Scripts

Not Applicable

#### Template ArchestrA $Chaux\_2\_10

##### Description

GalaxyToolkit.DataTransferObjects.GalaxyAttribute

##### Derived from

$dwProduits

##### UDA's

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| UDA name | Data Type | IO | I | O | A | H |
| CO2\_2 | float |  |  |  |  | X |
| S | float |  |  |  |  | X |

##### Field Attributes

Not Applicable

##### Scripts

Not Applicable

#### Template ArchestrA $dwFLEX

##### Description

Not Applicable

##### Derived from

$dwVanneMotorisee2SG4.dwVariateur

##### UDA's

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| UDA name | Data Type | IO | I | O | A | H |
| bAlarmeCodeDefaut | boolean |  |  |  |  |  |
| bAlarmeCodeDefautTemporise | boolean |  |  |  | X |  |
| iCodeDefaut | integer |  | X |  |  |  |
| sAdresseIP | string |  |  |  |  |  |
| sAlarmeCodeDefautTemporise | string |  |  |  |  |  |

##### Field Attributes

Not Applicable

##### Scripts

alarmeCodeDefaut

|  |  |
| --- | --- |
| Name | alarmeCodeDefaut |
| Description |  |
| Trigger | Periodic of |

**Declarations :**

dim generationDefaut as discrete;

**Script :**

if generationDefaut == true then  
 'logmessage("if generationDefaut == true then");  
 Me.sAlarmeCodeDefautTemporise = Me.sAlarmeDefDRIVE+" code défaut="+Me.iCodeDefaut;  
 Me.bAlarmeCodeDefautTemporise = true;  
 generationDefaut = false;'défaut déja généré  
else  
 'logmessage("if generationDefaut == true else");  
 Me.bAlarmeCodeDefautTemporise = false;  
endif;  
if Me.bAlarmeCodeDefaut == true then  
 'logmessage("if Me.bAlarmeCodeDefaut == true then");  
 generationDefaut = true;'mémorisation du défaut  
 Me.bAlarmeCodeDefaut = false;  
endif;

alarmeCodeDefautMemorise

|  |  |
| --- | --- |
| Name | alarmeCodeDefautMemorise |
| Description |  |
| Trigger | OnTrue of Me.bAlarmeDefDrive |

**Declarations :**

Not Applicable

**Script :**

Me.bAlarmeCodeDefaut=true;  
logmessage("Me.bAlarmeCodeDefaut=true");

#### Template ArchestrA $dwGen\_Bouton

##### Description

GalaxyToolkit.DataTransferObjects.GalaxyAttribute

##### Derived from

$UserDefined

##### UDA's

Not Applicable

##### Field Attributes

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Field Attribute name | Data Type | IO Scaling | History | Limit Alarms | Rate Of Change Alarms | Target Deviation Alarms | Bad Value Alarm | Statistics |
| Bp\_Gen | boolean |  | X |  |  |  |  |  |
| Anim | integer |  |  |  |  |  |  |  |

##### Scripts

Not Applicable