

Reports

Following kinds of reports:

- Reports for single Cell
 - [1st_prio_reports_cellboard.pdf](#)
- Reports for Department / Plant
 - [2nd_prio_reports_cic.pdf](#)

Reports for single Cell

Reports Input

Description	Database Field Name	Rec field name
Location	ubicaz.codice	codubi
Year of reference		year
Month of reference		month

Reports Output Monthly

Description	Unit of measure	Formula	Db Field Threshold	Rec field name
OEE	%	$rv*rf*rq$	ubicaz.thmonoee	monthlyoe
Setup Percentage	%	setup time / d	ubicaz.thmonsetup	monthlysetup
Downtime Percentage	%	f - setup time / d	ubicaz.thmondownt	monthlydownt
Scrap Percentage	%	s/np	ubicaz.tmmonscrap	monthlyscrap

Reports Output Daily

Description	Unit of measure	Formula	Db Field Threshold	Rec field name
OEE	%	$rv*rf*rq$	ubicaz.thdayoe	dailyoe
Setup Time	%	setup time	ubicaz.thdaysetup	daysetup
Downtime Time	%	f - setup time	ubicaz.thdaydownt	dailydownt
Scrap Percentage	%	s/np	ubicaz.tmdayscrap	dailyscrap

Threshold

For each location (cell / department) will be required following maximum thresholds:

- monthly OEE %
- daily OEE %
- monthly Setup %
- daily Setup Time (Minute)
- monthly Downtime %
- daily Downtime (Minute)
- monthly Scrap %
- daily Scrap %

Following Query for modifying ubicaz table:

```
ALTER TABLE ubicaz ADD COLUMN thmonoee FLOAT;
ALTER TABLE ubicaz ADD COLUMN thmonsetup FLOAT;
```

```
ALTER TABLE ubicaz ADD COLUMN thmondownt FLOAT;
ALTER TABLE ubicaz ADD COLUMN thmonscrap FLOAT;

ALTER TABLE ubicaz ADD COLUMN thdayoeef FLOAT;
ALTER TABLE ubicaz ADD COLUMN thdaysetup FLOAT;
ALTER TABLE ubicaz ADD COLUMN thdaydownt FLOAT;
ALTER TABLE ubicaz ADD COLUMN thdayscrap FLOAT;
```

AgentVisualMng Ask

request	cellreports	
p1	rec(codubi,year,month)	year and month are optional

Retval is a Rec containing a field for each Output; each field is a JSon-Object as following:

- name: name of the output
- threshold: an array of values refers to limits (one threshold for each x value)
- xvalues: an array of values refers to the X axis
- yvalues: an array of values refers to the Y axis (12 items for monthly, 31 items for daily)
- um: an array of string, the first element is the unite of measure of X axis(Month, Day), the second element is the unite of measure of Y axis (% , Min)

The Retval Rec will contain also following JSON-Object to define time interval:

- monthly: an array of two integer elements; the first is the begin of time interval for yearly horizon, second is the end of the same
- daily: an array of two integer elements; the first is the begin of time interval for monthly horizon, second is the end of the same

Example URL Preview:

```
http://localhost/isw/webapp/enel/proled/iaf/ask/vismng/cellreports/newrec(jsrec,51,1,codubi,year,month)/NULL/0/400791/2017/4?_cnt=17
```

Example Javascript Preview:

```
iaf({p1:{codubi:"400791",year:2017,month:4},ag:"vismng",req:"cellreports",nume:0}).ask(function(rv){})
```

Oee Overview

AgentVisualManagement manages OEE-Overview.

Def: OEE-Overview is an OEE calculation over the hierarchy of the plants, follows the hierarchy

We define a central DB in which the hierarchy of location is stored; in particular this information is stored into ubicaz table.

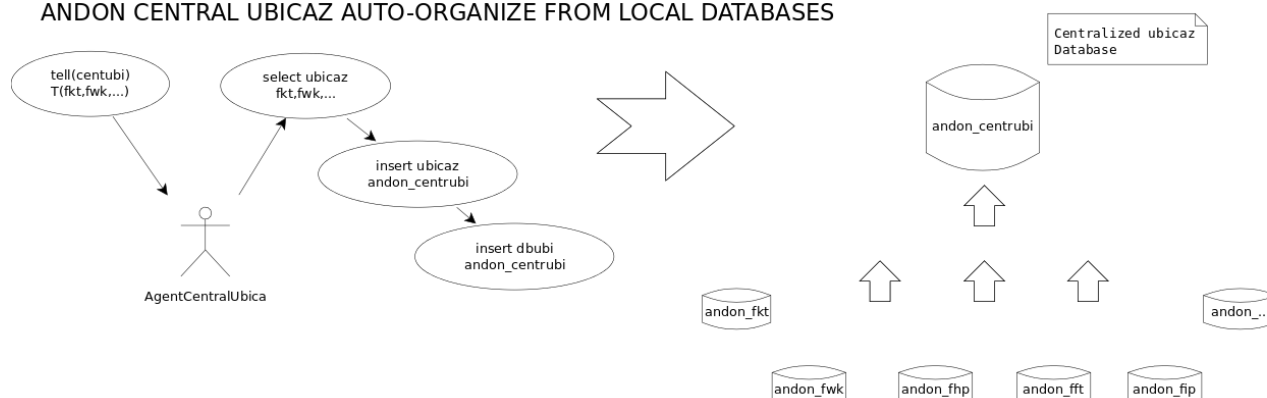
Furthermore it's necessary that AgentDataOEE is able to connect specific database where are stored OEE data (fact/dimension). To do that we define into central database following table:

```
CREATE TABLE dbubi (codubi VARCHAR(51) NOT NULL PRIMARY KEY, agdbname VARCHAR(101)
```

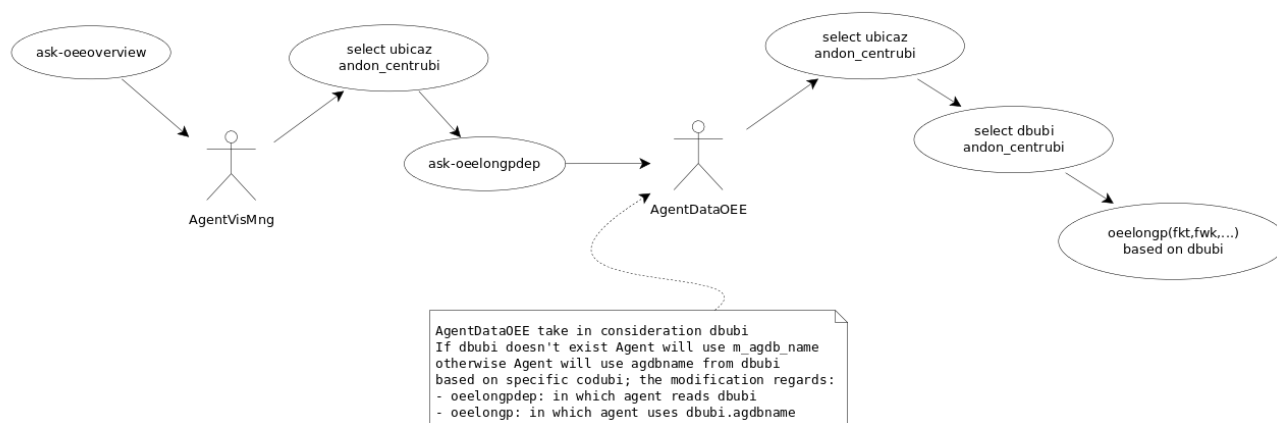
NOT NULL);

Following schema of software solution for Global OEE-Overview

ANDON CENTRAL UBICAZ AUTO-ORGANIZE FROM LOCAL DATABASES



OEE-OVERVIEW FROM CENTRAL UBICAZ AND LOCAL DATABASES



AgentVisManager, AgentDataOEE, AgentCenterUbica for this topic was stored in a specific platform, in which are defined also all tpevodb agents.

Following the current version of this platform:

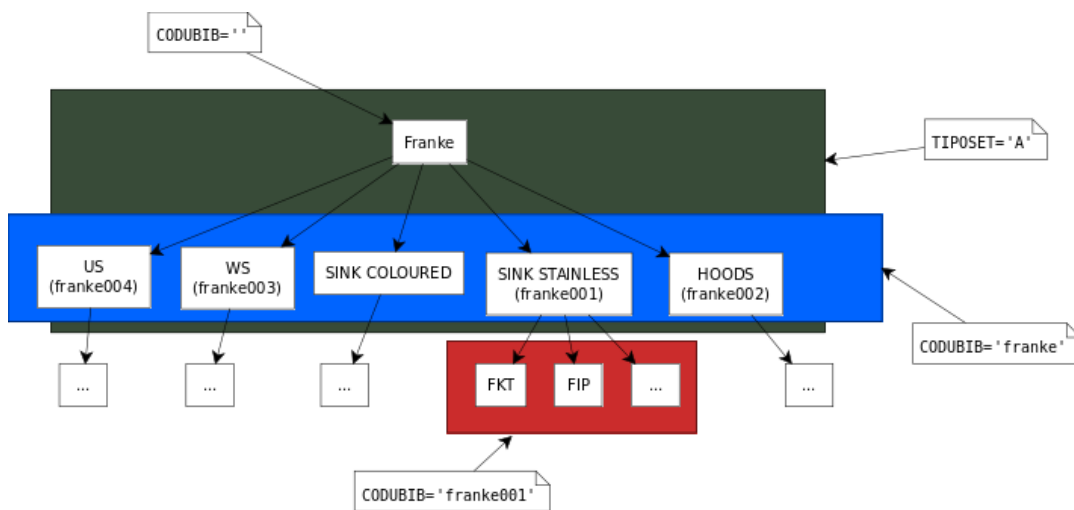
[xnet_agents_oev_ow.xml](#)

Following an image represent current Plant Hierarchy defined by Simon Fretz

Needed for:
 US (Bill)
 WS (Martha)
 Sinks coloured (Bart)
 Sinks stainless (Holger)
 Hoods (Gianluca)

Bill Fogt	FHP FMM FKC FBR
Martha Rzeszut	FWK FNO FSA? FAR FPL? FHN FIZ
Bart Doornkamp	FGD
Holger Stephan	FIP FKT FBS FPW FSA? FNL FRUS FIM FEN
Gianluca Mapelli	FFO FFT FFU FFF FFX FFB

For each database we should define the related edge of hierarchy defining Area and Company, both defined as TIPOSET='A'



Additional reports

Maintenance reports