

## Allocation Factors

Sahara allows using allocation factors to distribute monthly and daily productions and injections from well level to formation, layer or zone levels.

The allocation factors can be saved in what Sahara calls alternatives. By default, Sahara includes a base alternative, but the user can define his/her own alternatives in the **Allocation factor alternatives** window. To calculate, import or update allocation factors, the alternative type must be compatible with data.

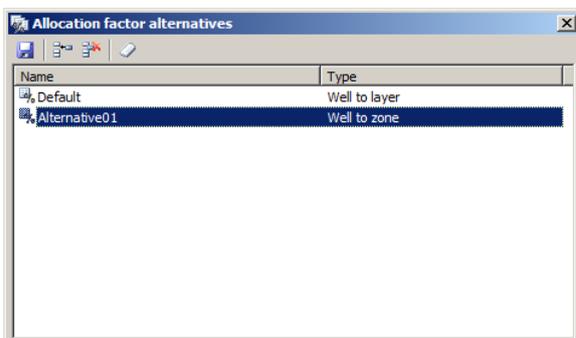
### Allocation Factors Alternatives

This window, accessible from **Tools > Allocation Factors > Allocation Factors Alternatives** allows defining different alternatives to use. Each alternative has a name and a type.

The available types are:

- Well to layers
- Formation to layers
- Well to formations
- Well to zones

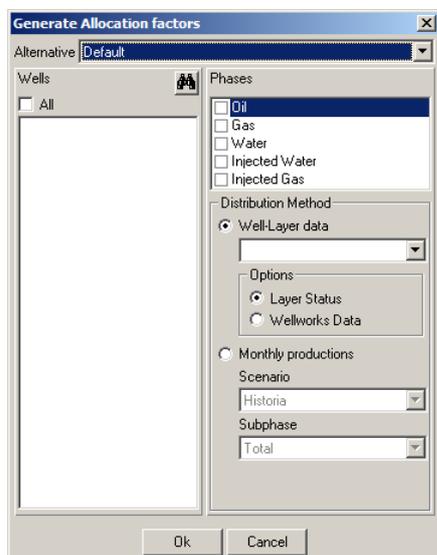
By default, Sahara includes a “well to layer” base alternative named “Default”.



### Allocation Factors Generation

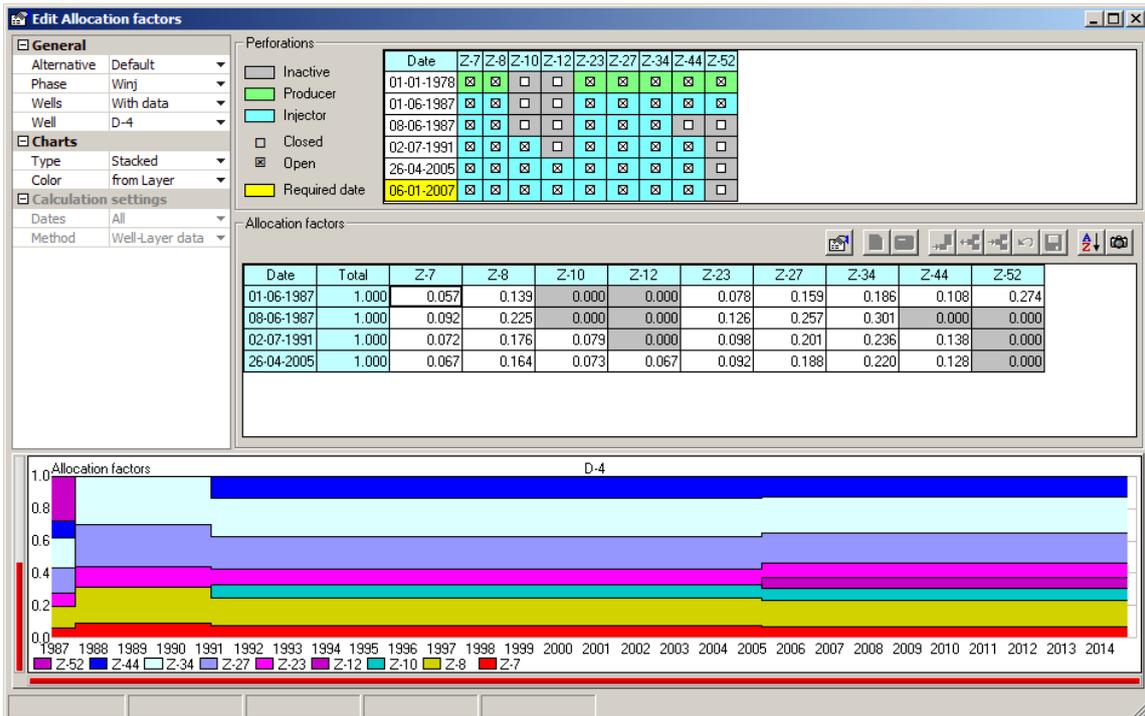
In this window, accessible from **Tools > Allocation Factors > Generate**, the user can generate automatically, for a particular alternative, allocation factors for the selected wells and phases. The allocation factors generation would have into account the layers' status.

To do the calculation, it can be considered a well-layer variable to allocate production or the monthly production al layer level.



## Allocation Factors Edition

This window, accessible from **Tools > Allocation Factors > Edit** allows visualizing and editing the allocation factors for a specific alternative, well and phase.



The right side upper panel allows selecting the allocation factors alternative to work with and some others display and calculation settings.

The Perforations panel, at the top of the window, shows a table with the evolution in time of the formations, layers or zones status, according to the alternative type.

The Allocation factors panel contains a table showing the data. This panel can be used to visualize the information or to edit it.

Finally, the chart at the bottom of the window displays the allocation factors evolution in time.

## Allocation Factors Calculation

The Allocation factors calculation window can be accessed from the Edit button . It allows generating allocation factors for the selected date or several dates together using different methods. The window looks different depending on the method.

**Well-Layer data and Scattered data Method:**

Layer	NT (m)	Factors			
		01-06-1987	08-06-1987	02-07-1991	26-04-2005
Z-7	1.68	0.057	0.092	0.072	0.067
Z-8	4.10	0.139	0.225	0.176	0.164
Z-10	1.83	0.000	0.000	0.079	0.073
Z-12	1.68	0.000	0.000	0.000	0.067
Z-23	2.29	0.078	0.126	0.098	0.092
Z-27	4.68	0.159	0.257	0.201	0.188
Z-34	5.49	0.186	0.301	0.236	0.220
Z-44	3.20	0.108	0.000	0.138	0.128
Z-52	8.08	0.274	0.000	0.000	0.000

**PLT/ILT Method:**

Top	Bottom	Factor	Layer	Top	Bottom	HT	Fact H	Net Thickness	Factor
[m MD]	[m MD]	[fr.]		[fr.]	[m MD]			[m]	[fr.]
1749.40	1757.33	0.250	Z-17	1749.36	1757.34	7.98	0.99	6.95	0.250
1823.77	1828.04	0.112	Z-28	1823.76	1828.00	4.24	1.00	4.24	0.112
1833.37	1835.51	0.108	Z-30	1833.25	1835.61	2.36	0.91	2.18	0.108
1844.65	1849.53	0.080	Z-31	1844.58	1849.57	4.99	0.98	4.99	0.080
1860.65	1863.85	0.035	Z-34	1860.63	1863.97	3.34	0.95	2.69	0.035
1867.82	1872.69	0.075	Z-35	1867.70	1872.54	4.84	0.98	4.84	0.075
1877.26	1881.38	0.060	Z-37	1877.26	1881.52	4.26	0.97	4.26	0.060
1888.08	1892.05	0.150	Z-39	1887.97	1892.17	4.20	0.95	4.20	0.150
1911.71	1921.16	0.130	Z-44	1911.67	1921.22	9.55	0.99	8.84	0.130
Total		1.000							1.000

Layer	Factor
	[fr.]
Z-17	0.250
Z-28	0.112
Z-30	0.108
Z-31	0.080
Z-34	0.035
Z-35	0.075
Z-37	0.060
Z-39	0.150
Z-44	0.130
Total	1.000

**Applying Allocation Factors**

This window, accessible from **Tools > Allocation Factors > Apply** is used to generate diary or monthly productions at zone, layer or formation level. To allocate the production the user must select the alternative, wells, phases and if the productions would be daily or monthly.

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