

Analysis of complex data
by interactive graphics

VisPlain



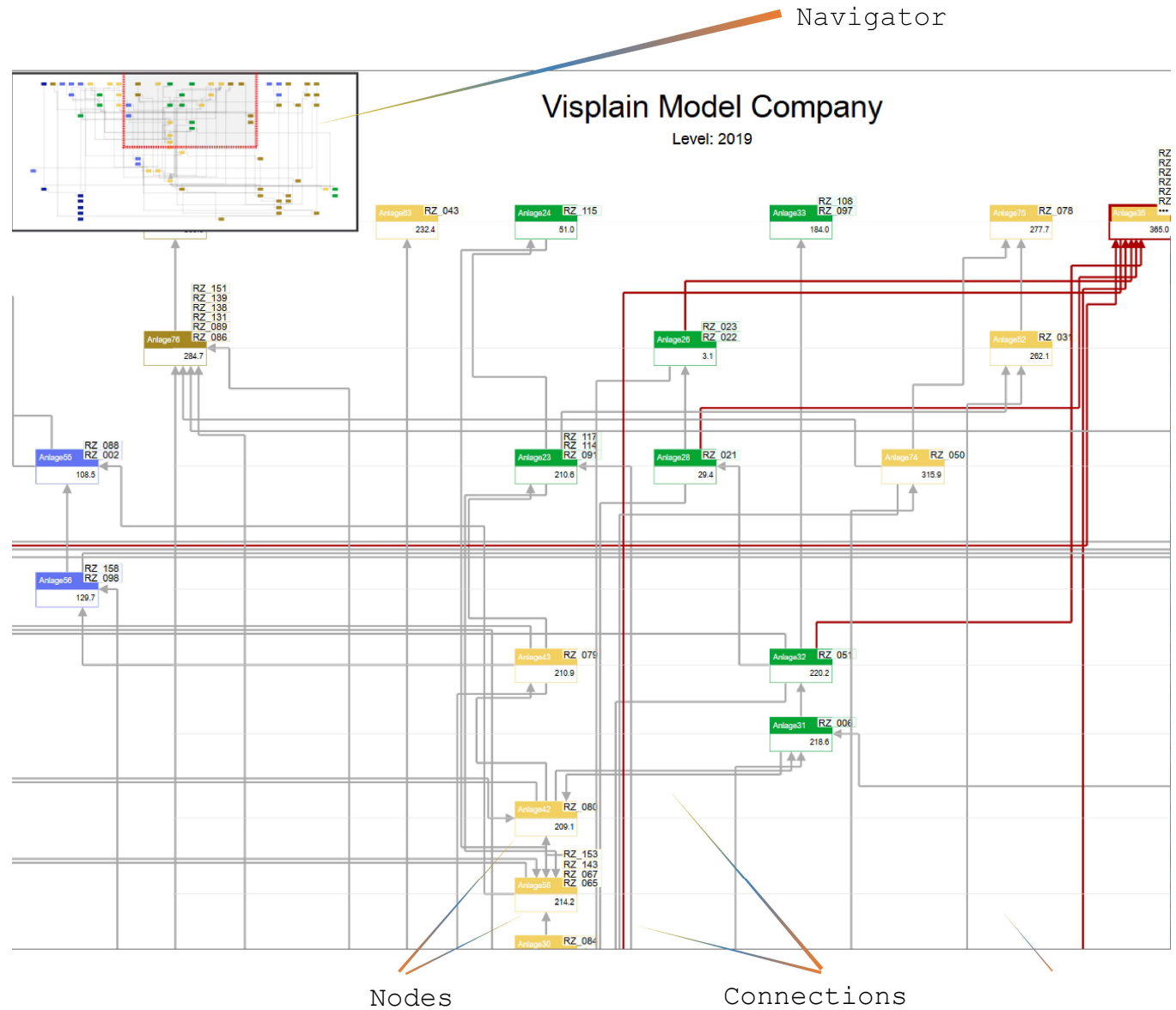
Big Data → *Smart Data*

Line	Sel. Ebenen	2019
↓ 2019	Anlage26	
DaysUsed_Line		3.103
CostLaborUsed_Line		2811 Euro
CostMaintUsed_Line		1470 Euro
CostOtherUsed_Line		2057 Euro
↓ Recipe	Rezeptur023	
Quantity		20,986 t
VarCost		44944 Euro
DaysUsed_Recipe		0,357
↓ Recipe	Rezeptur022	
Quantity		161,100 t
VarCost		235349 Euro

Line	Value
Anlage26	3.1
Anlage28	29.4

VisPlain :

- full web browser based,
- highly interactive,
- data browsing
- and working
- toolset
- for end users
- and data miners



Navigator

Visplain Model Company

Level: 2019

Nodes

Connections

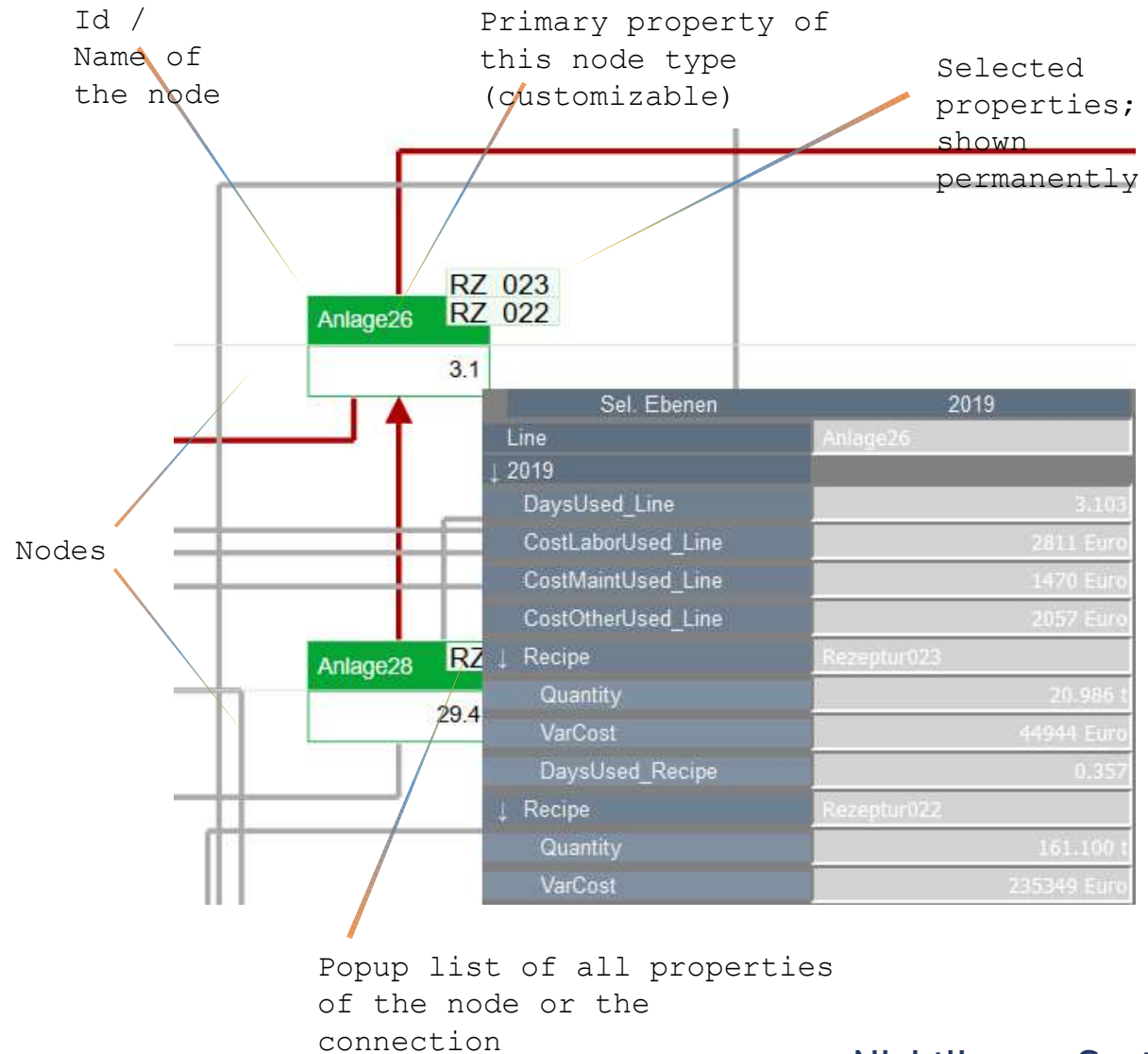
Nichtlineare Systeme GmbH

Information in VisPlain is :

- Structured on nodes and connections,
- with both being attributed.

Attributes come from :

- the original source,
- or are computed on the fly based on defined relationships



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Positionierung

VisPlain

VisPlain® ermöglicht interaktives, visuelles Arbeiten in komplexen Datenstrukturen und spricht damit folgende Gruppen von Benutzern an:

- ‚Knowledge worker‘ welche effizient und kreativ arbeiten.
VisPlain erlaubt dazu das Betrachten und Navigieren in stark strukturierten Datenräumen.
Darüber hinaus können zusätzlich abgeleitete Informationen integriert werden.
- ‚Endbenutzer‘ welche auf Basis wiederkehrender Daten Informationen zur Abwicklung ihrer Prozessen benötigen.
VisPlain bietet hier in einem vorgegebenen Rahmen strukturierten Zugriff

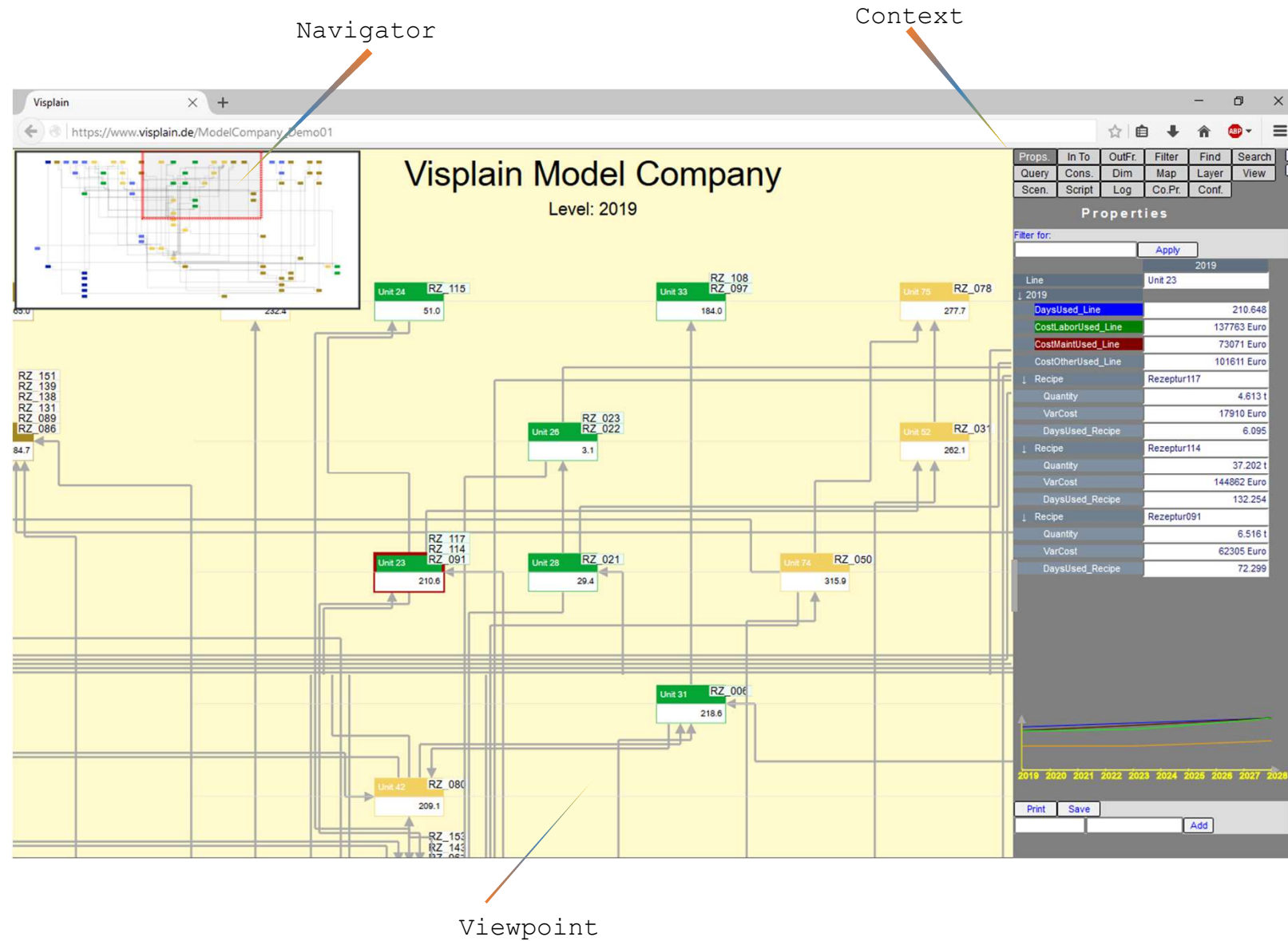
VisPlain ist kein separates Produkt sondern wird im Rahmen von Projekten in die dort geschaffenen Lösungen integriert.

Durch die ausschließliche Bedienung im Webbrowser integriert es sich gut in bestehende Infrastrukturen

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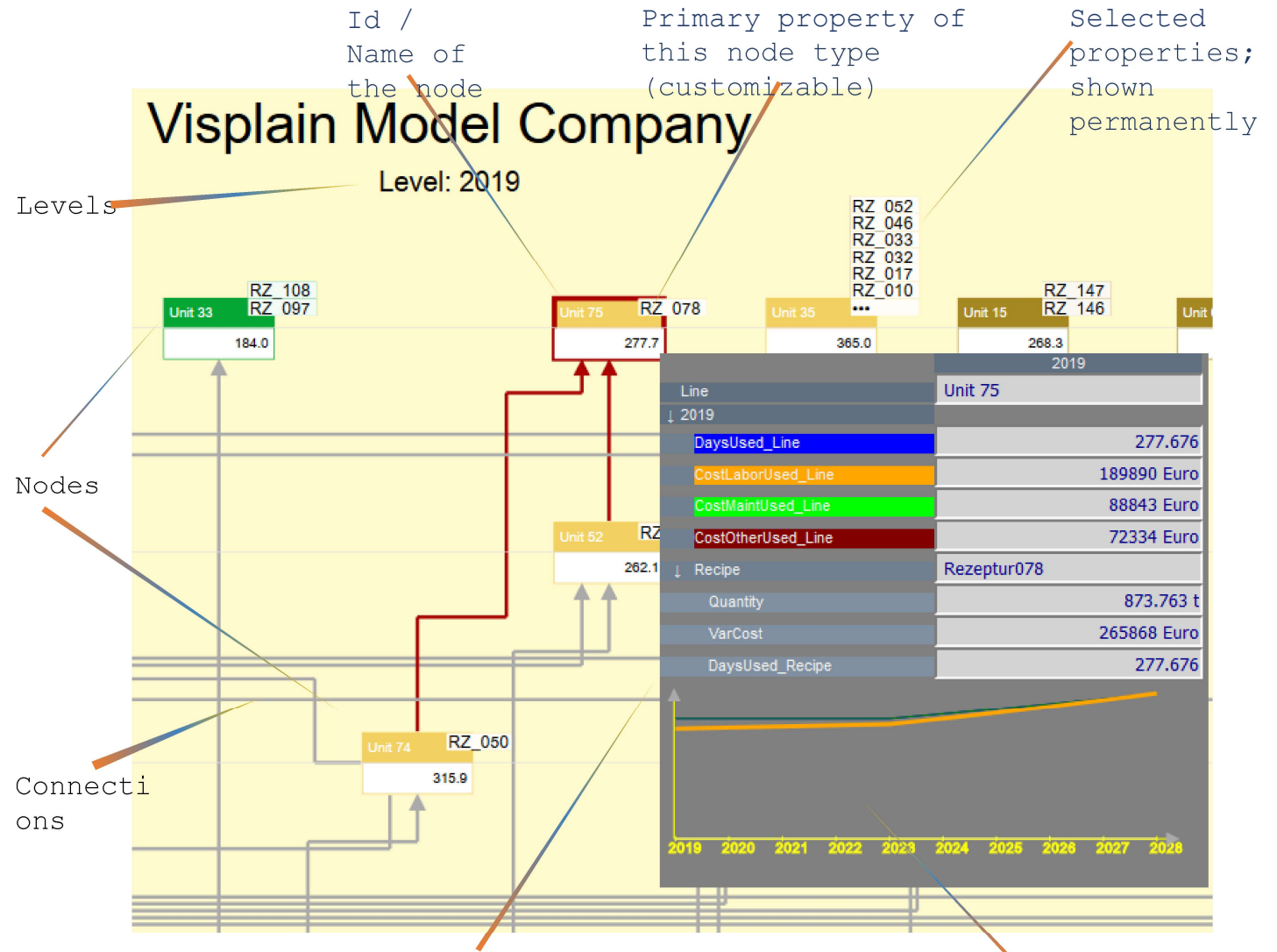
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Information in VisPlain is :

- Structured on *nodes* and *connections*,
- with both being attributed → *properties*.

Properties are coming from :

- the original source,
- or are computed on the fly based on defined relationships



Popup list of all properties of the node or the connection and time

Graphical chart of values over a selectable dimension

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Information in VisPlain can be searched by :

- Free text
- Expressions on property values,
- Constraints

Results :

- Are instantaneous visualized,
- May be the base for follow up searches
- May be saved / exported / printed

Props	In To	OutFr.	Find	Search	Query	Cons.	Dim
Map	Layer	View	Scen.	Co.Pr.	Conf.		

Structured Search

Variant:

Source (working set)

Constrain Source by:

Constrain Target by:

Constrain by:

&&

Max depth:

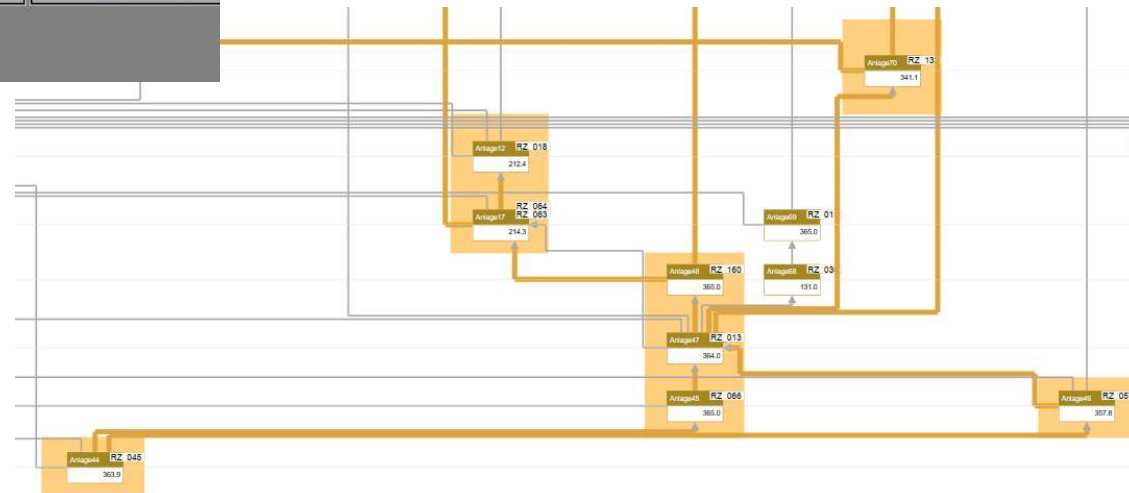
Save as Set:
 Blue Green Brown None

Drag to input field:

Props.	In To	OutFr.	Find	Search	Query
Cons.	Dim	Map	Layer	View	Scen.
Co.Pr.	Conf.				

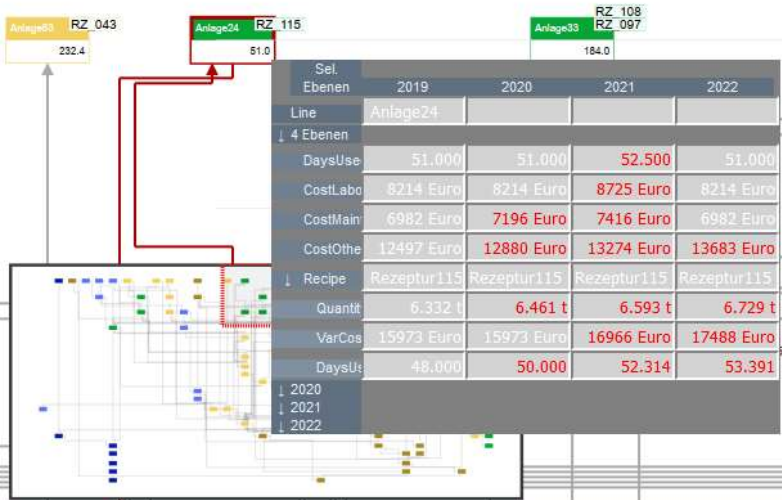
Constraints

Quantity		897.80 : 8977.
DaysUsed		
VarCost		0.00 : 9541644
CostLaborUsed		
CostMaintUsed		208902.58 : 1;
CostOtherUsed		192840.38 : 1;
Shortage		
Line		



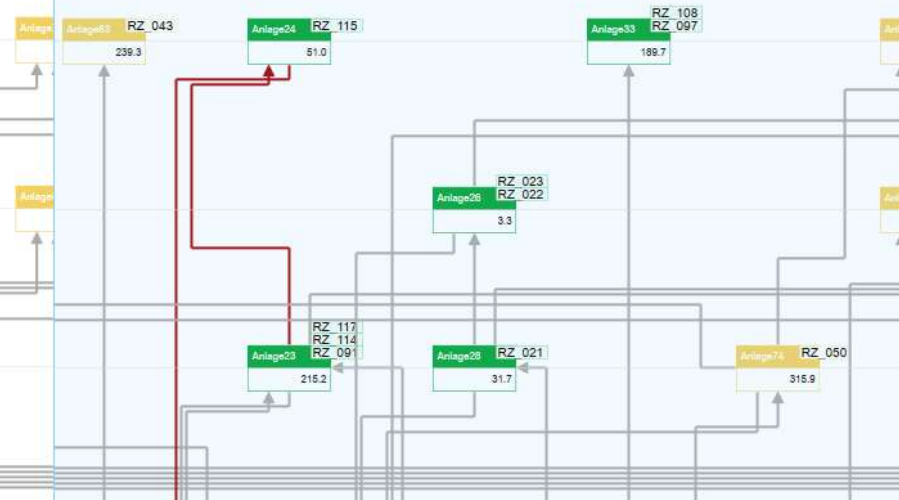
Visplain Model Company

Level: 2019



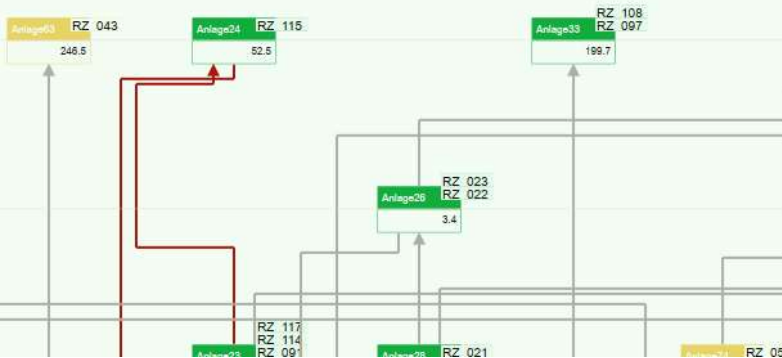
Visplain Model Company

Level: 2020



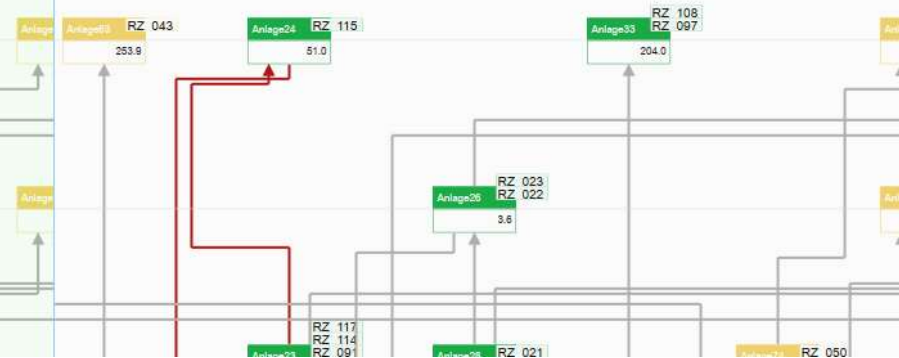
Visplain Model Company

Level: 2021



Visplain Model Company

Level: 2022



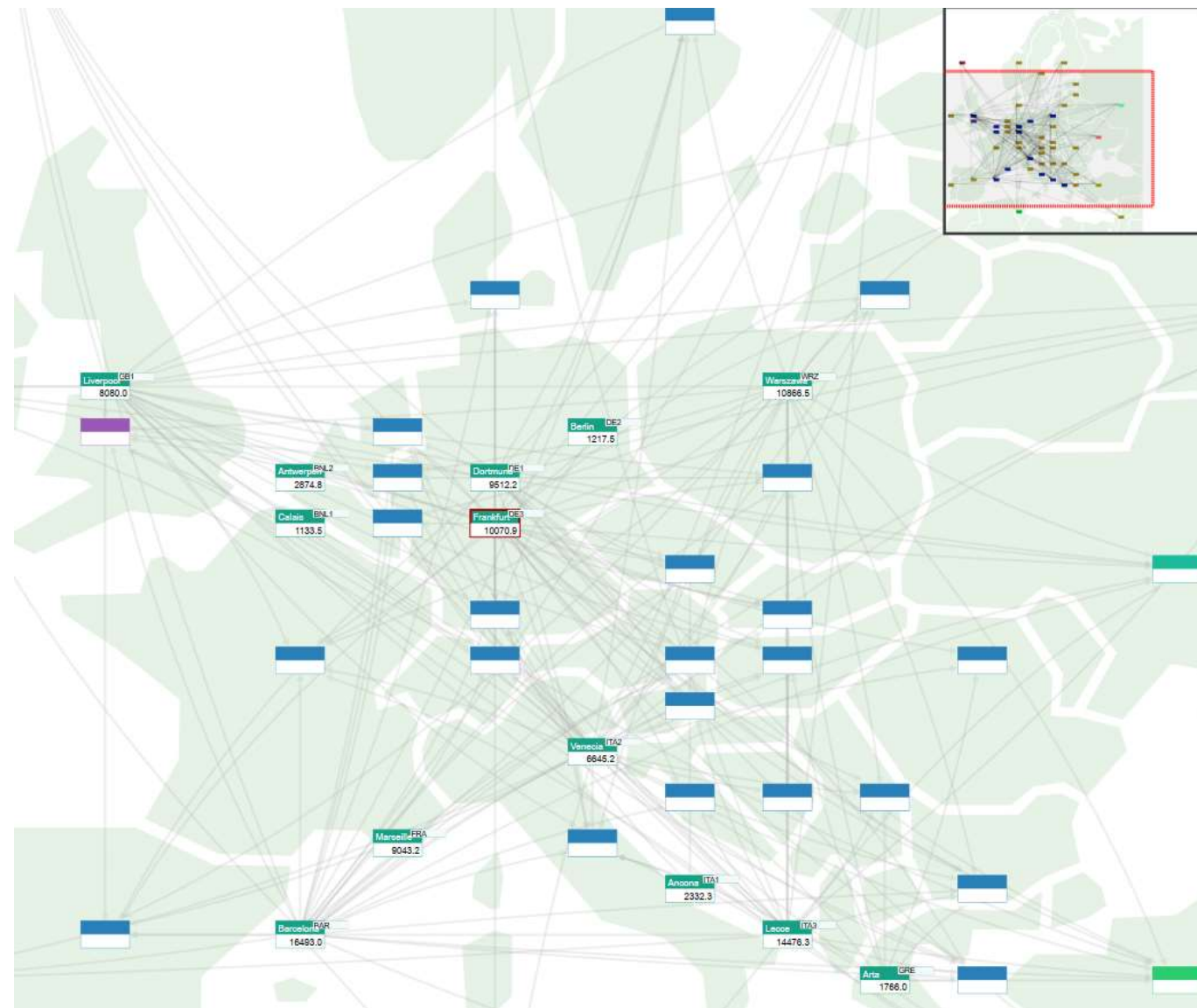
Props. In To OutFr. Find Search Query Cons. Dim
Map Layer View Scen. Co.Pr. Conf.

Properties

Filter for:

Sel. Ebenen	2019	2020	2021	2022
Line	Anlage24			
4 Ebenen				
DaysUse	51.000	51.000	52.500	51.000
CostLabo	8214 Euro	8214 Euro	8725 Euro	8214 Euro
CostMain	6982 Euro	7196 Euro	7416 Euro	6982 Euro
CostOthe	12497 Euro	12880 Euro	13274 Euro	13683 Euro
Recipe	Rezeptur115	Rezeptur115	Rezeptur115	Rezeptur115
Quantit	6.332 t	6.461 t	6.593 t	6.729 t
VarCos	15973 Euro	15973 Euro	16966 Euro	17488 Euro
DaysUs	48.000	50.000	52.314	53.391

Kartenansicht

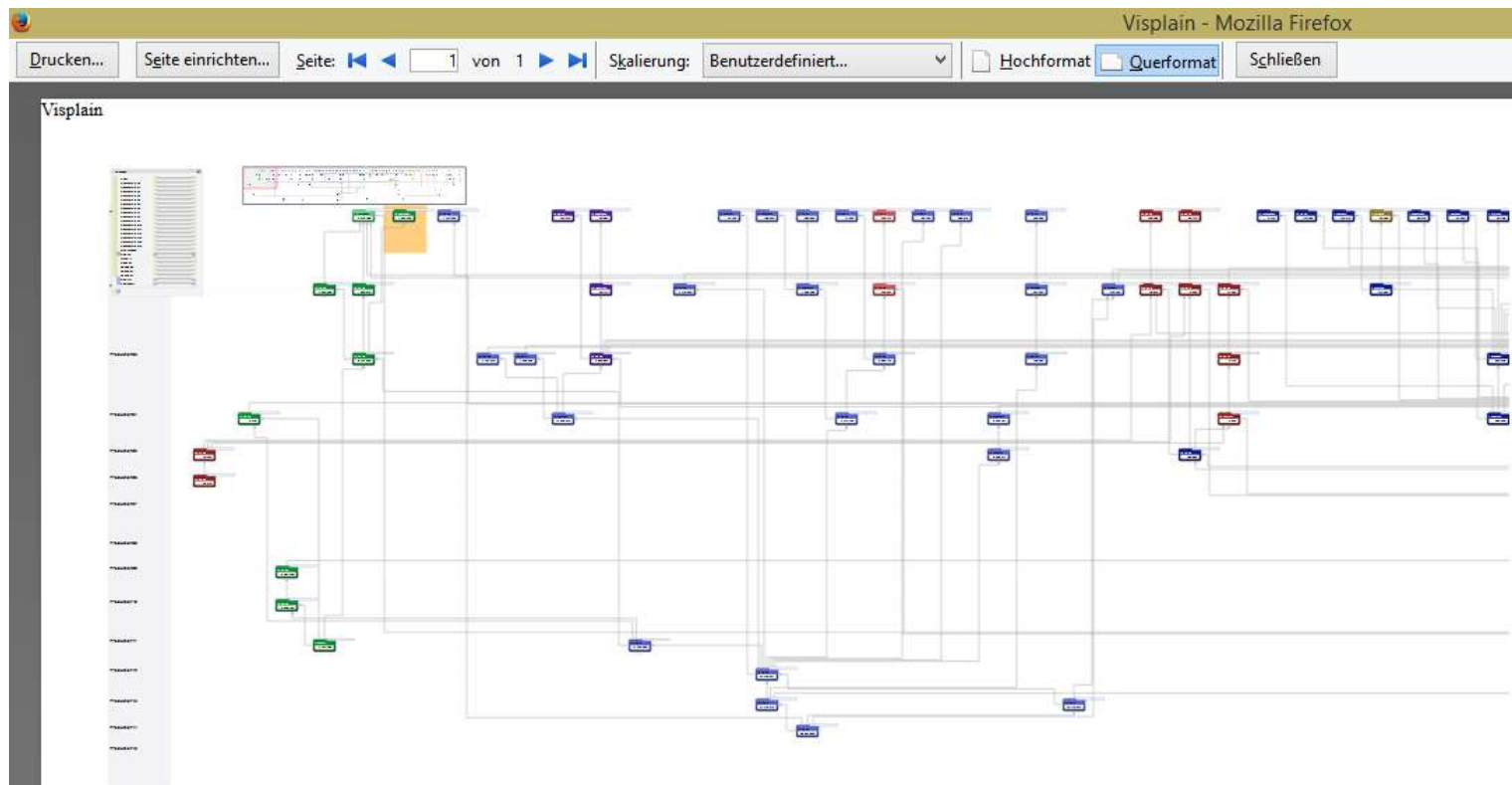


Die Positionierung der Knoten kann anstatt durch den VisPlain internen Positionieralgorithmus auch fix vorgegeben werde.

Zusammen mit der Möglichkeit Hintergrundgraphiken zu hinterlegen ermöglicht dies z.B. eine kartenorientierte Arbeitsweise.

Alle gewohnten VisPlain features stehen zur Verfügung.

Output



Using entirely web standards, graphics can be output directly in the web browser.

An additional PDF generator is provided.

Selected tabular data can be exported to excel.

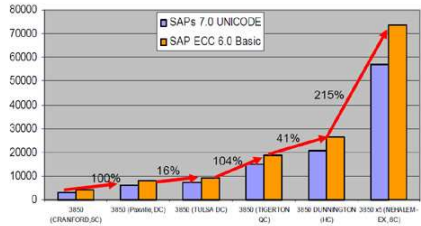
The graphical information can be exported in SVG format.

OR projects: What is changing ?

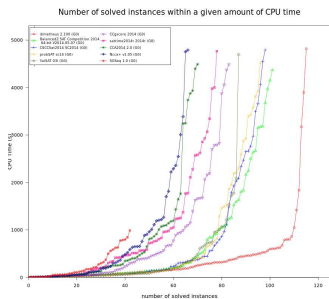
Recent Improvements

Allow for

Enables

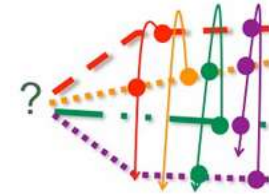


Hardware performance increase



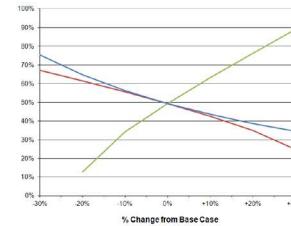
Solver throughput increase

Increases in model complexity



Scenarios

More computation runs



Sensitivity analysis

'online' capability

More data which is more complex and refreshes more often