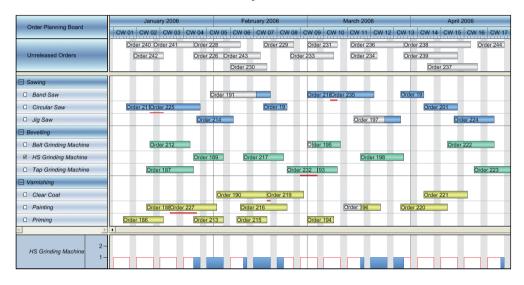
## VARCHART XGantt

# Gantt Charts – easily integrated and clearly visualized



One control, three editions:

- ▶ ActiveX
- .NET
- ► ASP.NET





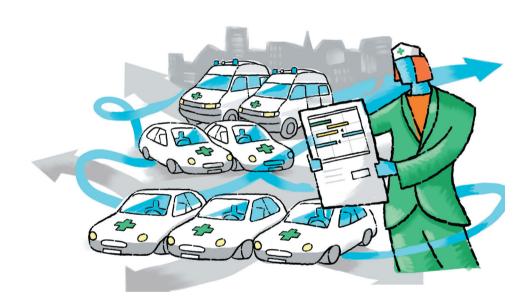
## VARCHART XGantt creates a clear overview

Today's planning environments, with data coming at you from all directions, demand that you maintain a clear overview of what is happening at any given moment. You need to be able to act quickly to keep things on track. VARCHART XGantt supports even your most demanding data visualization and manipulation requirements with Gantt diagrams that go beyond the ordinary.

Quickly and simply integrated into your applications, VARCHART XGantt helps you recognize bottlenecks, avoid delays, and utilize resources efficiently. It makes complex data easy to understand.

With VARCHART XGantt, you get a robust development tool that generates clear, flexible Gantt diagrams. Your time from concept-to-deployment is reduced dramatically, leaving you with the ability to focus on other aspects of your business. And VARCHART XGantt supports the most common technology standards, including ActiveX, .NET, and ASP.NET.

VARCHART XGantt is an interactive Gantt graphics component. Its modular design allows you to create applications that fit your requirements and those of your customers. Plus, you get a reliable proven Gantt tool; you already know whether or not you can meet your customer's requirements before you write your first line of code.



#### **Benefit from our Strengths**

- ► A wide variety of visualization choices Don't just view your data, edit it, too.
- ► Easy printing and presentation
- ► Reliable run time behavior
- ► Simple and fast integration

- ► Especially suitable for Web applications
- ➤ Support of ActiveX, .NET and ASP.NET technology
- ► Flexible resource planning and scheduling

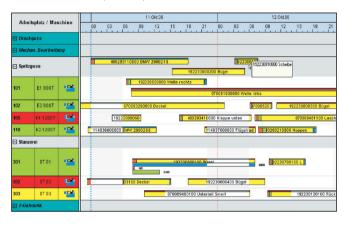
You can rely on VARCHART XGantt, from a company with many years of experience building and supporting Gantt visualization products.

## VARCHART XGantt in the right place at the right time...

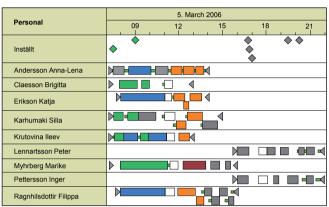
... and the right quantity of the right objects with the right quality at the right price. VARCHART XGantt supports planning and visualizes the data possibilities with flexible organization from various areas of application:



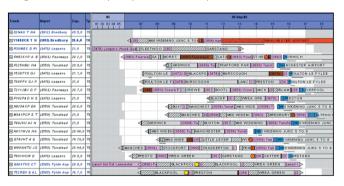
## **Production** – Optimize your resources



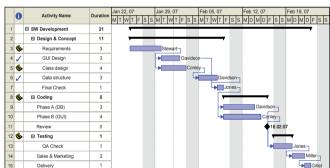
### **Service management** – Control your services



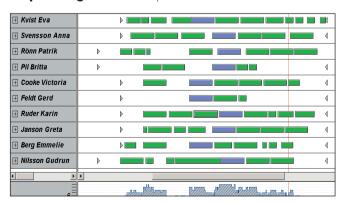
#### **Logistics** – Make your processes transparent



## Project management – Illustrate workflows clearly



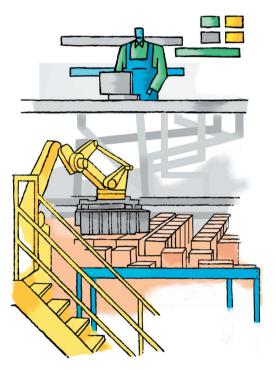
## **Dispatching** – Master complex data





## **VARCHART XGantt controls production**

With VARCHART XGantt, you receive a flexible graphical planning component with powerful functions, all without the risk and expense of in-house developed solutions. When you consider just the cost of maintaining the complex code that would be required to build your own Gantt solution, it's no wonder so many developers have chosen to take advantage of all that VARCHART XGantt has to offer.



When it comes to visualizing or manipulating data at control stations, VARCHART XGantt is just the right tool for a multitude of applications within production planning and control. Data from your system is transferred to VARCHART XGantt directly. VARCHART XGantt's flexible data interface adapts to your existing data structures quickly and easily. Actual values, target/actual cycle time, levels of performance of the machines, as well as the finishing time predicted by the tool are displayed in a convenient Gantt format. The job status is highlighted in color so that approaching deadlines can be recognized and dealt with in plenty of time. An interactive time and sequence plan can be created by drag & drop.

image of what sometimes can be a complex reality. The clarity and timeliness of complex data enables operating personnel to utilize human resources and machine capacity efficiently.

Flexible planning requires flexible information systems. With its many options, VARCHART XGantt allows the developer to focus directly on the needs of the user. More than 60 hierarchically structured object types are available, with 540 characteristics, 260 methods and 100 events.

Extensive and understandable documentation, as well as fast and NETRONIC's competent support, assist you with the development and implementation process.

			B	July 2007								
	BNR	Resource Description		CW 29	CW 30	CW 31						
+		13101	Assembly Site 1				<b>—</b>					
+		13102	Assembly Site 2		X/////							
+		13201	Assembly Site 2 Multiple									
+		13202	Pre-Assembly									
+		23201	Component Assembly									
+		23202	Final Assembly									
+		73001	Assembly Area									

Because current production requirements are constantly changing, your users need a way to see and react quickly. VARCHART XGantt opens up a whole range of possibilities to your users, making things like targeted just-in-time delivery possible.

With the integration of VARCHART XGantt in your product or application, you have software that provides a clear overview of production planning, with a real-time

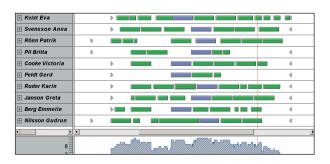
## **VARCHART XGantt plans intelligently**

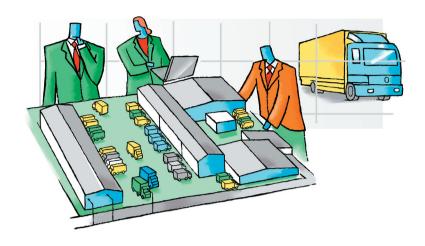
Planning managers are confronted with ever more complex planning processes:
Resources and processes need to be constantly optimized to support rising customer requirements and competitive pressures.
Without clear and meaningful diagrams, the sheer volume of data is difficult to deal with

The integration of the VARCHART XGantt visualization component into your scheduling system makes it possible to represent the resulting processes and resource utilization graphically. You are able to display personnel, device status, stand-by positions, and more – all with commonly understood Gantt views.

Since deviations from the target plan can never really be ignored, short term decisions must often be made under high pressure. With the final decision resting with the planning manager, a well-prepared diagram showing the necessary overview provides a way to react quickly and appropriately. VARCHART Gantt diagrams help you with the coordination of scheduling processes and allow you to achieve a better optimization of your resources. This increases productivity, preserves resources and saves time.

You can even show multiple instances of XGantt at the same time, allowing you to use "What if" scenarios, show a recommended schedule along side an actual schedule, and more. Use drag-and-drop to move bar items between instances to build schedules from templates. And, with VARCHART XGantt as a Web application, your customers interactively work in a common browser interface.





## **VARCHART XGantt manages projects**

With today's highly-complex projects, professional project management software is invaluable. VARCHART XGantt supports your customers through all project phases, from initiation to reporting.

				1 00 07	1 00 07	E-1-05-07	E-1-40 07	F-1- 40 07
	0	Activity Name	Duration	Jan 22, 07	Jan 29, 07	Feb 05, 07	Feb 12, 07	Feb 19, 07
	_	-		MTWTFSS	MITWITFISIS	MITIWITIFISIS	MDMDFSS	MIDIMIDIFISIS
1			21	· ·				<b></b>
2		☐ Design & Concept	11	<b>—</b>		<del></del>		
3	<b>\$</b>	Requirements	3		Stewart-			
4	<b>/</b>	GUI Design	3		Davidso	h—		
5	<b>\$</b>	Class design	4		Conle	у¬		
6	/	Data structure	3		<b>4</b>	Davidson-		
7		Final Check	1			Jones-		
8	<b></b>	☐ Coding	5			_	7	
9		Phase A (DB)	3			+	Davidson	
10		Phase B (GUI)	4			-	Conley-	
11		Review	0				<b>16.02.0</b>	7
12	<b></b>	☐ Testing	1					<del>-</del>
13		QA Check	1				<b>└</b>	Jones -
14		Sales & Marketing	2	1				Miller
15		Delivery	1	1				→ Gillet

Your customers gain a detailed overview of project structures and the extent of resource utilization – all within a clear, concise Gantt representation. The graphical display of summary bars and milestones makes possible the early recognition and recovery of critical phases. Project teams work interactively together with VARCHART XGantt, independent of location. With VARCHART XGantt, you have the power and flexibility to offer your customers an efficient visualization that will help them on their way toward successful project completion.

## VARCHART XGantt — modular, flexible and easy to integrate

The integration of VARCHART XGantt components into existing systems is quite easy. Powerful diagram and layout functions are available; only relatively little code is necessary for an application. Adjustment to individual requirements can take place both at the design stage via easy configuration dialogues, and at runtime via the comprehensive API. The support of Unicode ensures the processing of character sets from all languages at the same time, independent of the operating system. All texts which are visible at runtime can be localized in VARCHART XGantt to the target language.



VARCHART XGantt components are available in ActiveX, .NET and ASP.NET formats. This ensures a smooth transition from one technology to another. The functionality of the individual editions is nearly identical, differing mostly in terms of naming conventions in the API.

VARCHART XGantt ASP.NET is a web server control, with which you can develop Gantt applications using .NET languages. Control is implemented on the server side and no installation procedure is required on the client side. Only a JavaScript-enabled HTML browser needs

Web applications of VARCHART XGantt	ActiveX Edition	.NET Edition	ASP.NET Edition			
Execution of Gantt applications	On client side	On client side	On server side			
Drag & Drop interaction	Yes	Yes	No			
Required on the server side	Any operating system Any web server	Any operating system Any web server	Windows server IIS 5.0 or higher .NET 2.0 or higher ASP.NET web page			
Required on the client side	Windows + Internet Explorer VARCHART XGantt has to be controlled with VBSript, or embedded in a separate ActiveX control element	Windows + Internet Explorer .NET 2.0 or higher VARCHART XGantt must be embedded in a separate own .NET control element	Any operating system Javascript enabled HTML browser			

VARCHART XGantt can be used in most common development environments that permit the integration of ActiveX or .NET control elements. Most commonly-used Windows operating systems are supported also, including Windows 7, Windows Vista and Windows XP. Direct support is offered for Visual Studio 2005/2008/2010, Delphi, C# and C++ Builder, PowerBuilder, Centura and Progress.

to be available. This ensures consistent operability, reduced maintenance requirements, and a higher level of security.

Comprehensive help is available for your product development:

- ▶ Detailed documentation
- ► Many easy to follow examples
- A comprehensive set of source-code sample applications
- ► Fast and competent support

Take advantage of time and cost savings, and increased quality, through the re-use of components tailor-made particularly for Gantt applications.

## **VARCHART XGantt offers a wide variety of functions**

#### **Table**

Configure the table appearance using different line formats according to your needs. Beside several lines of text, the cells can be split, and can contain different data-controlled symbols. Groups with elements and subsets of a hierarchical representation can collapse and expand interactively.

Order ID	Client Name	From	CarlD	Ctatus
Order ID	Client Name	Until	Car ID	Status
1	Esser, Wolfgang	12.12.08	S-3	1
'	Esser, wongang	19.12.08	5-3	~
2	Major Erich	22.12.08	S-3	
	Meier, Erich	06.01.09	5-3	
3	Hanning Daniel	08.01.09	S-2	
3	Henning, Daniel	13.01.09	3-2	Щ

## **Grouped layout**

Collect the elements of a group together under one group title and one summary bar. Grouping can be performed at several levels. Switch back and forth between normal, overlapping and optimized layout, depending upon your need for information.



#### Hierarchical layout

Order the element list in the table according to a hierarchical code and make the different levels recognizable by indentation of a graphical tree structure and summary bar.

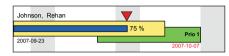
ID	Structure	Start	End		February 2007										
ID	Structure	Start	End	Duration	01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 2										
1	⊟1	02.02.07	17.02.07	3											
2	1.1	02.02.07	06.02.07	2											
3	1.2	06.02.07	08.02.07	2											
4	田1.3	09.02.07	17.02.07	6											
5	1.3.1	09.02.07	13.02.07	2											
6	1.3.2	12.02.07	15.02.07	3											
7	1.3.3	13.02.07	17.02.07	4											
8	<b>11</b> 2	02.02.07	10.02.07	-4											
13	⊟3	06.02.07	20.02.07	3											

#### Intuitive interactions

Adapt the visualization on the screen and change the basic data based on user interactions. For example, elements are temporarily movable, can be assigned to another group or even dragged from one Gantt diagram instance into another.

#### Bar

Represent your dates, periods or degree of progress through different colors, bar forms, symbols and your own bitmaps. Bars can be marked and supplemented with individual "Tooltip" texts.



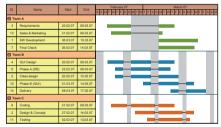
#### Time scale

Divide the time scale into sections, select increments within the range of seconds to years and fade out work-free time intervals as desired.

Airport	F	ebrus	iry		February 22, 2007							February									
Airport	19	20	21	00.00	02:0	0 04:0	00 06	000	08:00	10.00	12.00	14:00	16:00	183	00	20:00	22:00	23	24	25	26
⊞ City				П	П		Т	П	Т				П	Т	П						_
British Airways	0					- 1	BA 66	0 6	A 63	B	A 8		Œ	A 243	7			00			
Luthansa								LH	3589			LH 47	1								
Air France								П	AF 38	AF 9	2388	AF	3449							0	

#### Calendar raster

Visualize the availability of resources within groups based on configurable calendars. Each group can possess its own calendar.



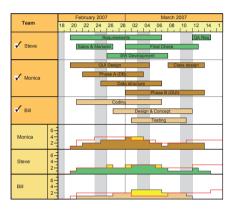
#### **Attributing**

Automatically adapt the appearance of the objects through the data-controlled mapping of data. For example, an order becomes red if the promised date of delivery is exceeded.



### Histogram

Compare the available capacities of your resources in histograms to necessary resources along the time axis. Independently emphasize over- and under-loading with different patterns and colors.



### **Printing**

Select the page layout and preview it in the integrated print preview. Specify which diagram parts are to be repeated on each page and on how many pages it should be placed.



### **Data interface**

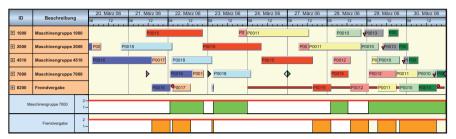
Use the flexible data interface in order to adapt easily to existing data structures. Different tables with arbitrary data fields can be defined as in a relational data model and linked with one another. A CSV import filter is available for reading the application data.

### **Run time behavior**

Handle large data sets with VARCHART XGantt. More than 20,000 activities or tasks can be worked on interactively without difficulties.

## **VARCHART XGantt plans resources**

Resource planning helps to avoid the overloading of resources, reduces idle time, and helps you keep to delivery dates by the optimal scheduling of tasks.



### **Strategies**

Define planning strategies "as early as possible" or "as late as possible" (Just-In-Time) for all jobs individually or together.

#### **Accommodate Restrictions**

Consider task priorities, the order of sequences, release and due dates and capacity restrictions.

### **Groups of resources**

Leave it to the program to determine the exact resources for a certain operation from a group of resources which has been assigned to the operation in the application data; e.g. a certain lathe from a group of three lathes.

## Allocation of several resources

Assign to an operation as many working and material resources as you need for this operation; e.g. a machine, a group of persons, whom the machine can serve, and a certain prefabricated part from the warehouse, which is to be processed on the machine.

#### Selected customer references

#### Software houses

APS | ENTERprise (D) Aspen Technology (USA) ASR Synergy (MAL) Consona (USA) Datel Protex Systems (GB) De Schutter'Neroc NV (B) DiMS! (NL) IBM Tivoli (USA) IBS (D) ID Ing. Ges. für Datentechnik (D) Infor Global Solutions (D) INFORM (D) Jeeves Information Systems (S) L-Class (BG) Microsoft Business Solutions (DK) MPDV (D)

ORDAT (D)

proALPHA (D)

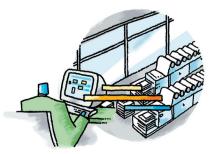
PSI Transportation (D)
QMASTOR (AUS)
RESA Airport Data Systems (F)
SA Service Alliance (D)
Sage Software (D)
SAP (D)
Sopheon (USA)
SpecTech (N)
Trax (USA)
T-Systems (D)
Unit4 Agresso (N)

### **In-house applications**

Airbus Industries (F)

Argonne National Laboratory (USA) BASF (B) Bayer Technology Services (D) Boeing (USA) British Airways (GB) Comp. Siderúrgica de Tubarao (BR) Elia Asset (B) FedEx (USA) Fletcher Residential (NZ) Ford Motor Systems (USA/D) Fraport (D) Homag Holzbearbeitungssysteme (D) Johnson & Johnson (USA) Klinikum rechts der Isar (D) Korean Air (ROK) Liebherr-Werke (D) Logistics Planning Services (AUS) Meyer Werft (D) O2 Germany (D) Posco (ROK) Ramco Systems (India) SAR Gov. of Hong Kong (HK) Swarovski (A) Telekom Austria (A) T-Systems International (D)

E.ON IS (D)



VARCHART and XGantt are registered trade marks of NETRONIC Software GmbH other names are registered trade marks of the appropriate companies.

Copyright 2010 NETRONIC Software GmbH. All rights reserved.



Volkswagen (D)

TALINOTALE COMMUNE CIME

Pascalstraße 15 52076 Aachen · Germany

Phone +49(0)2408 141-0 Fax +49(0)2408 141-33 sales@netronic.com www.netronic.com