

netViz® 6.0

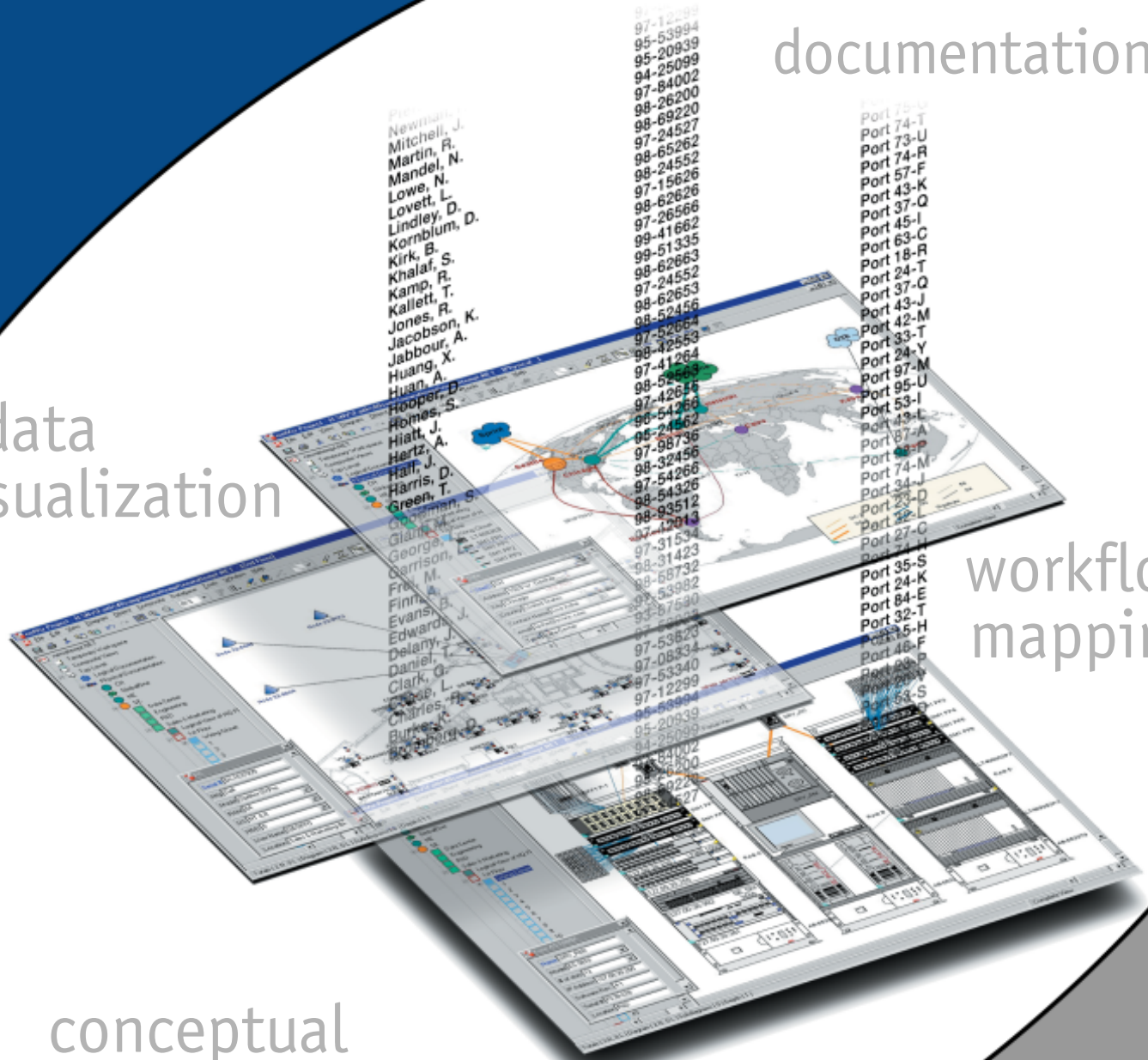
The smart way to picture information.

network
documentation

data
visualization

workflow
mapping

conceptual
modeling



netViz 6.0 - The smart way to picture information.

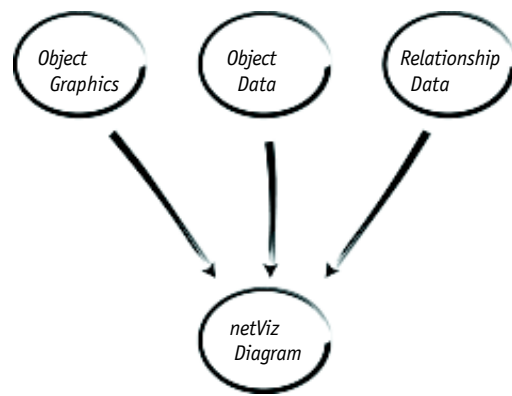
IT systems like WANs, LANs and Telco circuits, as well as workflow models and conceptual designs all have one thing in common; they're complicated collections of data and relationships. They can be hard to understand, let alone manage. Designed to deal easily with large amounts of data, netViz seamlessly integrates information and graphics to create a "visual database," making it easy to see objects, their unique characteristics and their relationships to one another across vast, complex systems. Here's how we do it:

Data-Rich Graphics

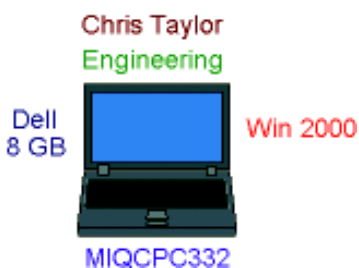
With traditional drawing programs, what you see is what you get. But empty graphics provoke more questions than answers. What is it? Where is it? Who uses it? How is it configured and what is it connected to?

We don't use graphics just to create drawings. Rather, we use them because it's easier to understand complicated information when it's presented graphically. In netViz, objects and diagrams are embedded with data and they display that information graphically.

netViz was designed from the ground up to deal easily with large amounts of complex, interconnected data. Because netViz maintains an internal repository of information about all of the objects in your netViz diagrams and the relationships between them, it's easy to manage, troubleshoot, answer questions about, change and understand your systems.



Data-Embedded Objects



When you create an object or link in netViz, you choose the data fields to embed in the object. You can create a virtually unlimited number of data fields to keep track of whatever information is important to you. For computer equipment, you may want to record such things as CPU type, manufacturer and amount of RAM. For a link, you may want to store information about what type of relationship it represents, where it goes and who is responsible for it.

An object's embedded data can be shown in different ways. The Inspector shows the data associated with any selected object. It's also easy to display object or link data directly on a netViz diagram by simply dragging and dropping the appropriate field. You can even selectively hide data fields to ensure that your enterprise information is only distributed to those with a need to know.

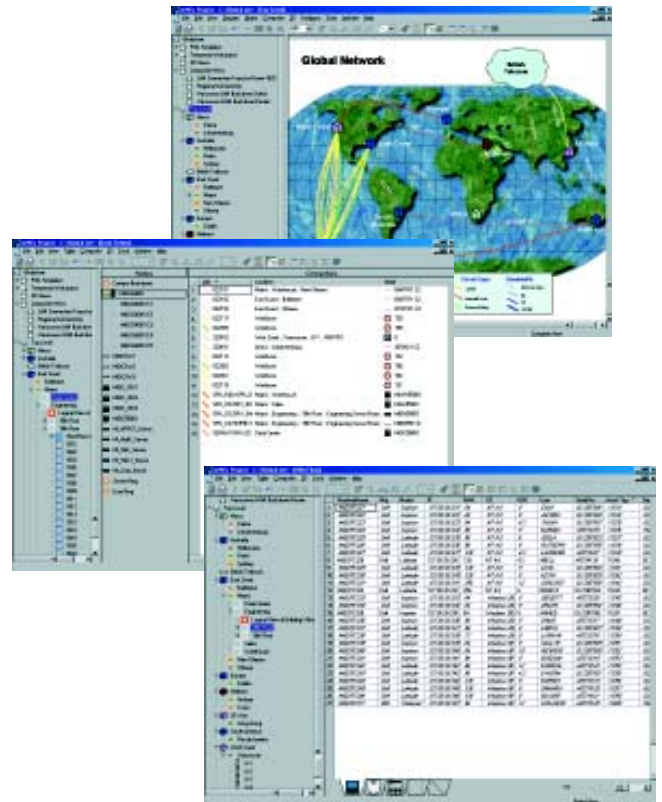
Different Views of Data

Once you've documented your system in netViz, you can see system data in different ways. netViz can display data through conventional diagrams, but only because drawings provide a great way to understand complex information.

In netViz, diagrams are only the beginning. Just choose Table View from a menu pulldown and we'll show you diagram information in a spreadsheet-like format. Columns can be re-sorted, moved or hidden. netViz tables are organized by object type and are easy to print out when you need reports. Any data changes made in Table View will automatically be reflected in other views throughout the project.

Selecting Connectivity View will bring up a screen showing how objects in a selected diagram are connected throughout a system. This view is based on the same nodes and links used in diagram view - it's simply a different way of looking at them that emphasizes interconnections. That makes it easy to trace links, see which nodes are connected to a common link, see a "server-centric" view of a network, and more.

netViz also allows objects to be depicted in more than one diagram simultaneously. You can, for example, create physical, logical and temporal constructs of a single system. Changes made in any view will automatically propagate across the project.



"netViz has helped us get a better understanding of our clients' networks. As a result, we've been able to offer better, more efficient service to our customers."

Bill Howell
Network Analyst, First Data Corporation

Drag in Graphics from Any Source



netViz ships with more than 20,000 generic and vendor-specific graphics of network and business equipment. But we also give you the unique ability to bring in graphics from virtually any source by simply dragging and dropping.

Just click on a file in Windows Explorer, a graphic from another application, even pictures on a Web page, and drag them into your netViz diagram. Our drag-and-drop feature supports all commonly-used graphic formats.

netViz automatically incorporates new graphics into your netViz project, and it's easy to change or add to the data fields associated with the new icons.

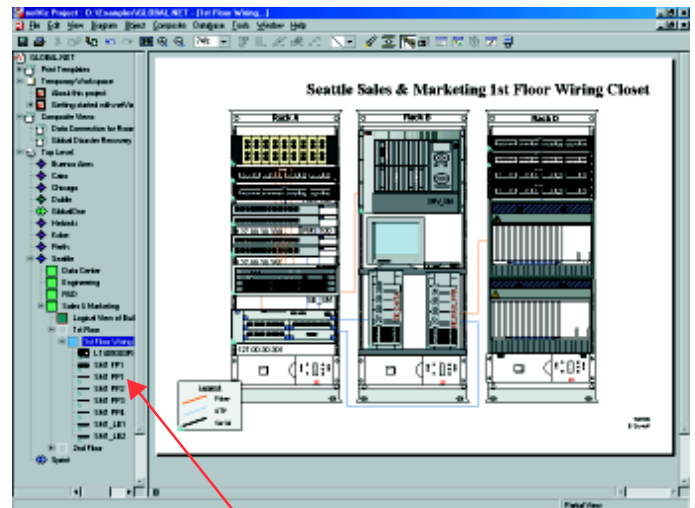
Multi-Level Diagrams

Your network or system doesn't exist on separate pages; neither should your documentation.

We provide easy, intuitive ways to create and view horizontal and vertical relationships throughout a project. The reason - interconnections are the essence of your network. The ability to understand relationships and trace connections is crucial. netViz allows you to break free of the single-page diagramming approach required in traditional drawing packages.

netViz stores and presents information hierarchically, and the connections between objects are tracked as carefully as the objects themselves. An entire network's data - including all of the information about the connections and relationships between components - is stored in a single file.

Once you've created a netViz project, it's incredibly easy to explore vertical relationships (e.g. building - floor - workstation - wiring closet - patch panel) or horizontal ones (e.g. all of the workstations on a chosen segment, all of the objects connected to a server or all of the distant termination points of each line going into a particular hub).



The Hierarchy Browser shows a project's entire vertical structure. You can go to any diagram by selecting it in the Browser.

"We were impressed with netViz's ability to depict complex hierarchies and launch directly from diagram objects to other applications."

Linda Carlisle, Placer County California
Network Systems Analyst

Search Diagram Data

"By standardizing on netViz, we've been able to see all of our network data in a single view that we can query depending on our needs. That saves USACE a lot of time and money."

James Bard
IT Planner for the Baltimore District of
the U.S. Army Corps of Engineers.

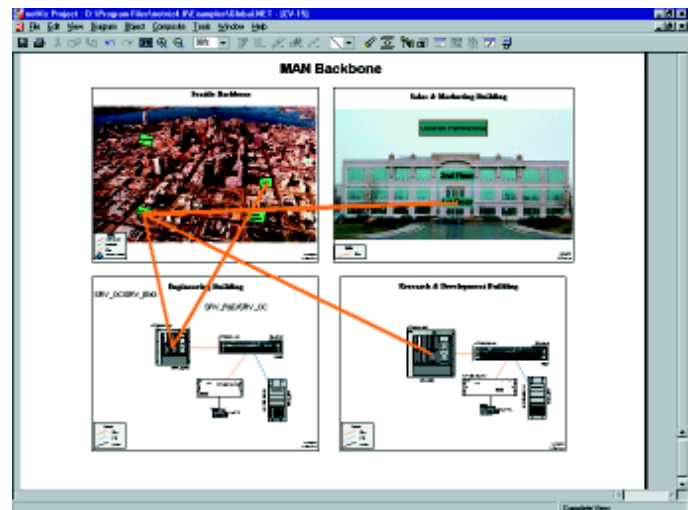
All of our views are driven by underlying data. That means you can do searches directly from your diagrams. Do a search by type to find all objects of a certain type or to find all objects of one type that contain a user-specified data value or range. You can also do searches by data value to find all of the objects of any type that contain the data values or text set in your search parameters.

Search results are displayed in tables, but by simply resting your cursor on a result record, netViz will instantly show you a thumbnail of the diagram where that object exists, and mark it with a flashing red arrow. That's just one of the ways we merge graphics and data.

Multi-Diagram Views

The visual display of complex data is our mission. That's why we make it so easy to create and examine different views of diagrams.

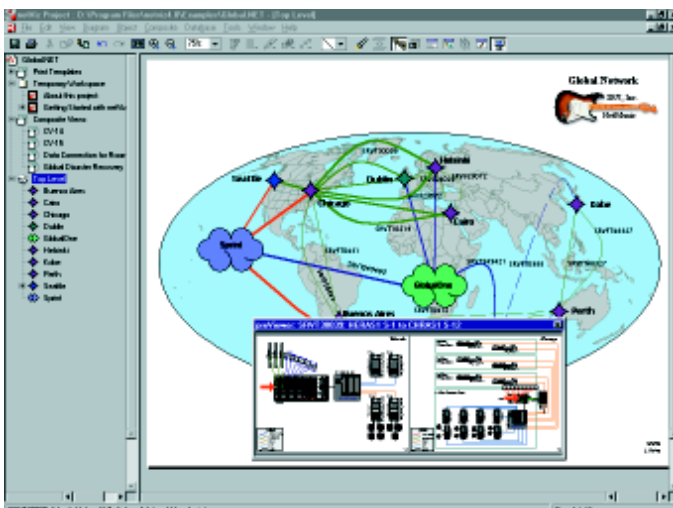
Composite Views provide one way of seeing object relationships across a large project. Just select two or more diagrams and netViz will display them and show you how components in those diagrams are linked to one another. A Composite View's diagrams and inter-diagram links are dynamic reflections of underlying data, so you can easily get hard information right from the diagram screen. If you like, save Composite Views so that you or other members of your team can refer to them later. Any data changes made to your netViz project in the interim will automatically be reflected when you reopen the saved Composite Views.



A double click on any thumbnail in a Composite View will take you directly to that diagram.

"We needed to develop standard ways to get a handle on what we've got, manage change orders and notify engineering personnel of what new equipment needed to be added at a given site. netViz now plays an integral role in that process."

Jonathan Thompson
Senior Enterprise Network Architect, ConAgra



When the cursor rests on a link, the Previewer shows thumbnails of the diagrams containing the link's endpoints.

You can even get a quick look at diagrams related to the one on screen without changing your current view. Just rest your cursor on a node and the Previewer will show you a thumbnail of the diagram under that node. If you rest your cursor on a link, you'll get an instant view of the diagrams at the link's endpoints. To go to any thumbnail diagram, just double click it. You can also use the Previewer when you're in Table View or looking at search results. Just rest your cursor on a table record. The Previewer will display a thumbnail of the selected object's diagram and will identify the object with a flashing red arrow.

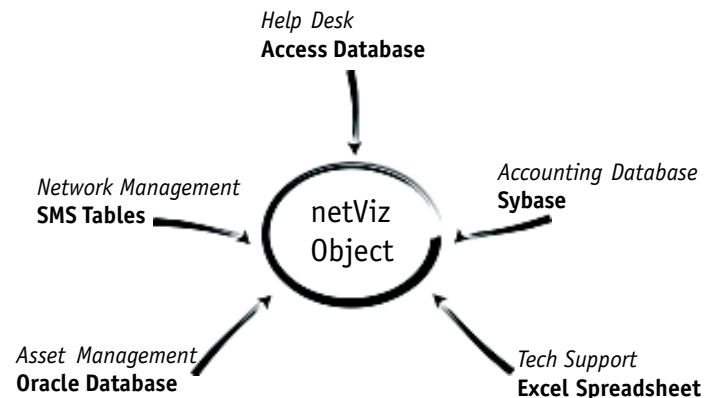
The Previewer is yet another way of helping you get a handle on a hierarchical system and visualize complex data graphically.

Database Interface

We recognize that you probably have existing databases and spreadsheets containing data about your enterprise. Not only can netViz read those outside data sources, but we make it easy to embed your enterprise information into netViz graphics with a unique drag-and-drop interface.

To create the connections, just select fields from your existing databases and drag them into your netViz objects. You can pick and choose individual fields from different tables to embed just the information you need. Users in a single organization can create their own netViz views of enterprise data by simultaneously pulling in different information from those same outside sources.

Once your netViz objects are linked to outside databases, a simple refresh command lets you bring current data into your netViz diagrams. If you like, you can write back from netViz to the linked tables. Whether or not you connect netViz objects to outside data sources, netViz always stores diagram data internally. This allows you to work with your netViz projects even when you don't have access to your enterprise data sources.



"The bottom line is that we've got an enormous amount of information in different places. netViz helps us consolidate and visualize the data we need to do our job."

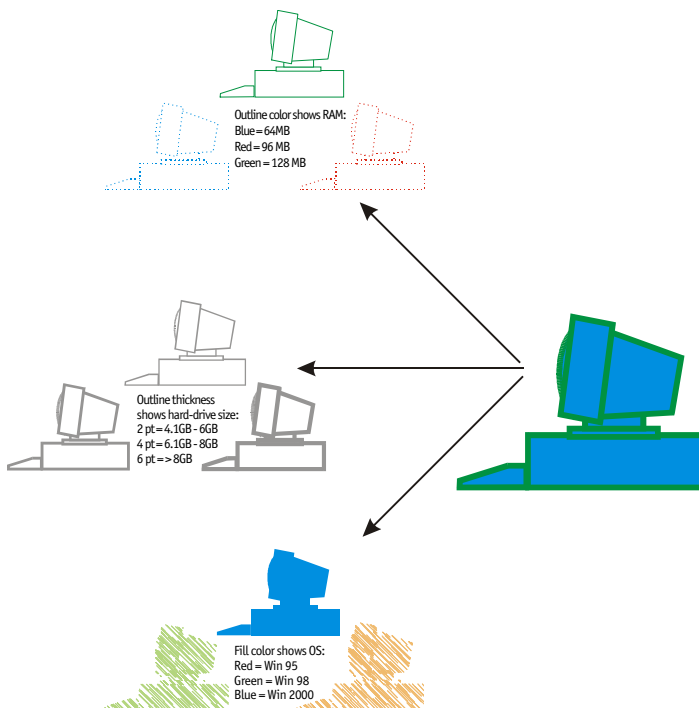
Bill Smith, Perot Systems

Data-Driven Graphics

One of our goals is to let graphics themselves reveal data. With an effective graphical depiction of information, complicated datasets can be easily understood and lots of complex information can be packed into a small display. With netViz's unique Data-Driven Graphics, the look of your graphics alone conveys hard data about your network.

Here's how it works: any netViz object type can be set to appear differently according to its embedded data values. Colors can be set to represent specific values, ranges or text fields. For example, you could set your workstation graphics in netViz to display operating system by object color, amount of RAM by outline color, hard drive size by outline thickness and malfunction by blinking. Anyone looking at a diagram would immediately know the configuration of the workstations in a diagram just by the look of graphics.

And because netViz diagrams are reflections of underlying information, data-driven objects dynamically reflect changes in their data values. That means that when the values change - either from a manual input or by an automated refresh from a linked database - the look of the objects changes automatically.



"We have lots of information, but without netViz it would just be rows and columns of numbers . . . By linking data to netViz graphics, we've made our data easily accessible to everyone who needs to see it, and that allows us to do our job better."

Juanita Goad, Janus Research Group

3D Views

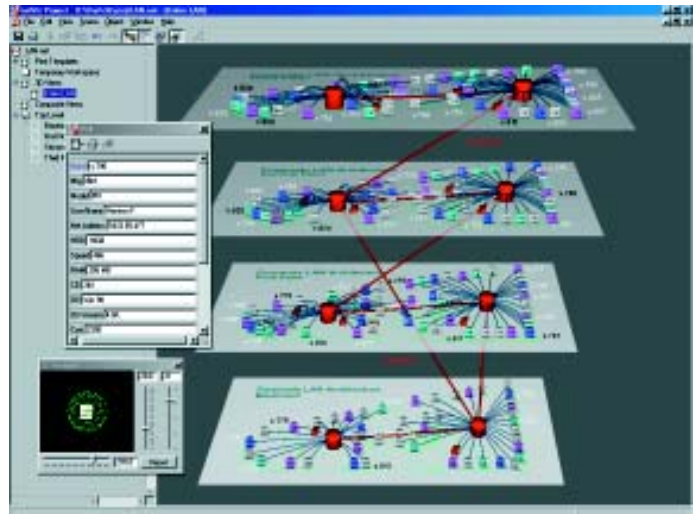
Complex systems are, by their very nature, three dimensional. To understand such systems, you need to see object relationships across an entire hierarchy. Any diagramming tool that decomposes system components into separate, flat diagrams distorts the entire picture. That's why we offer true three-dimensional visualization of information systems.

netViz 3D models and diagrams use OpenGL to create true three-dimensional objects and multi-diagram views that can be moved or rotated in any direction.

3D views are a powerful addition to the netViz suite of visualization tools. Three-dimensional presentations are especially good for understanding connectivity between diagrams – for example wiring between floors or wide-area connections between regions. 3D views also provide high information density. When diagram planes are tilted, the space required for each diagram decreases, making much more information available in a single scene.

Our 3D views are created from the same data underlying 2D views, so they work together seamlessly. Embedded data, for example, can be edited in either 2D or 3D, and the new information is instantly available across the project.

Providing 3D visualization is one of the ways that netViz lets you see your systems for what they really are – dynamic, interlinked collections of information and relationships.



It's easy to export our 3D views to a variety of formats. We support exports to .bmp, .gif or .jpg to create graphics that can be used in a wide range of applications. We also support export to .rib, the format developed by Pixar Studios for rendering images into realistic, lifelike graphics suitable for publishing or high-quality presentations.

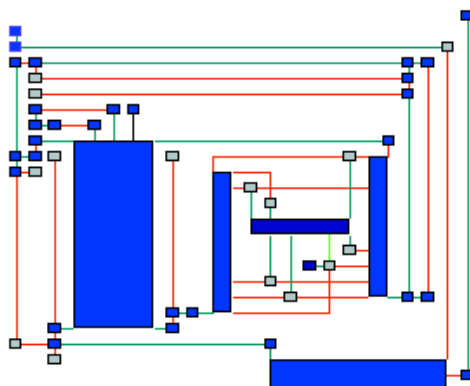
Graph Layout



Nodes arranged randomly



Same nodes after applying the hierarchical layout



Graph layout is an essential tool for network management, database design, software development, decision support and any other area where logical relationships need to be organized to be fully understood.

Our graph layout feature gives you the power to get a handle on the relationships among screen objects. Using different mathematical algorithms to organize linked objects, graph layout can automatically position nodes and redraw links to help you understand complex relationships. Choose from many different algorithms, including orthogonal, hierarchical and spring.



netViz® 6.0

Organizations around the globe use our data-enriched graphics to solve real-world problems. Here are just some of the ways netViz can help you:

Network Support

Tech support gets a call because a user can't log on to the network. Using netViz diagrams, trace every connection and component between that user and the server. See who else is connected to the affected segment, print out a table showing all of the workstations on the segment, and click on a record in the netViz table on screen to go directly to its corresponding diagram. Switch between physical and logical views of the system and open manufacturer's technical literature right from your netViz diagrams.

Procurement wants to upgrade a software package your company uses and needs to know how many licenses to get, your CFO wants to know which workstations were placed in service before a certain date, or tech support needs information about service contracts on WAN links. Instead of searching through files, spreadsheets, databases or notebooks, just do a data search within netViz.

Use stand alone programs to invoke netViz actions through OLE automation or modify netViz directly by making internal calls to create a dynamic, graphical front end to your existing network management software. Integrate management functions with netViz diagrams, and have your netViz diagrams automatically change when information in your management software changes.

Enterprise Knowledge Management

Use netViz to create temporal, logical and physical models of the same system. Modifications to an object in any one model will automatically be reflected in the others. Link Data-Driven Graphics to a metrics database and see graphically which components of your systems don't meet your requirements.

Use netViz to integrate diagrams of your workflows and your physical assets. For example, link your procurement and maintenance workflows to your network diagrams. A user could view a network component and simultaneously examine the internal processes involved in replacing or repairing the equipment.

With our double-click overrides and launch commands, you can just click on a graphic to launch other applications, go to the Web or perform basic diagnostics. Say you get a report that a component at a distant site isn't working. Just double click on the graphic in your netViz diagram to ping, telnet or perform a traceroute operation on the component. It's also easy to set a network-equipment graphic to open its manufacturer's Website or display troubleshooting guides.

Database Visualization

Link your existing database information to netViz diagrams and see your data graphically. When changes are made to the database records, refresh the data in your diagrams with a simple netViz pull-down menu or set netViz to perform an automated refresh at intervals you define. If you use Data-Driven Graphics in your netViz project, you'll see the modifications appear graphically. You can also modify data directly on the diagram and use netViz to update your database.

Connect your project-management database to your netViz diagrams. Use Data-Driven Graphics to display project status graphically. By just looking at the resulting netViz diagrams, you'll be able to see instantly which portions of a project need special attention. You can even keep sensitive data secure by designating selected data fields in your netViz diagrams as hidden fields.

netViz Corporation

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www.netviz.com