NaviGate™ Operations Visualization System
Software Product Description

Product Summary

The *NaviGate* Operations Visualization System (OVS) shows utility operations information via a Web-based and map-based user interface. Utilities can use OVS to display maps and reports on real-time operating activity such as trouble calls, maintenance work, construction activity, and so on.

Description

The standard *NaviGate* application displays data created in external data sources. *NaviGate* OVS enhances the data created in those external sources by analyzing the data, combining it with other data sources, and summarizing the data spatially and temporally. OVS also includes additional features in the *NaviGate* user interface to allow users to easily interact with the kind of dynamic data these applications involve. OVS provides the following specific features:

- OVS provides facilities to connect to, import from, and summarize the data in transactional systems such as trouble-call reporting systems, work order systems, and outage management systems. Data from these systems is connected to facility and customer data to create integrated maps and reports.
- The locations of transactions will be shown on the map (e.g., showing a utility vehicle at the location of a customer service or facility). Icons on the maps can be linked back to reports about the transactional data, so that users can click on icons on the map and get reports about those activities.
- OVS will thematically map the transactional data. OVS can summarize transaction activity by coloring service areas, counties, electric substation boundaries, water pressure zones, parcels, and the like.
- OVS provides "drill down" and "roll up" reporting about transactional activity. For example, users can look at a summary of all work orders currently active, then "drill down" into the region with the greatest backlog, and then continue to drill down through the service hierarchy, all the way to the individual transactions or outages.
- Data from multiple different operational systems can be shown and summarized simultaneously in OVS. For example, OVS can simultaneously show trouble calls from your Customer Information System, electric outages from your Outage Management System, work orders from your Work Management System, real time weather, and "call before you dig" tickets from the *NaviGate* Underground Service Alert Module.

Data Requirements

NaviGate OVS displays and manages data in the same spatial coordinate system (projection and datum) as the remainder of your *NaviGate* data. The system can also use reference (geographic) coordinates for the managed data. The data is stored in any standard relational data source supported by *NaviGate* (typically Oracle).

Installation and Configuration

The purchase price of *NaviGate* OVS includes professional installation of the software by a Gatekeeper Systems technician, and integration of the module into your existing *NaviGate* application. New data types are added by a properly trained system administrator or by Gatekeeper Systems under a support agreement. Contact Gatekeeper Systems for more information.

Software Prerequisites

NaviGate OVS uses the functions and features of the standard *NaviGate* application framework. You may add this module to any current version of *NaviGate*.

Support Options

Standard Support is available for this module, providing support via email, the Internet and telephone during normal Gatekeeper Systems business hours. Standard Support also provides product updates as new versions of this module are released.

Pricing

Refer to the *NaviGate* Price List for current pricing. Volume and package discounts are also available. Contact a Gatekeeper Systems representative for more information.

Licensing

This module is licensed under the standard Gatekeeper Systems license agreement. The license agreement grants access to the software source code for the licensed module. A copy of the standard agreement is available upon request.

Ordering

NaviGate OVS may be ordered by contacting Gatekeeper Systems. Please specify the *NaviGate* version with which you will be using this module.

Delivery

In most cases, the *NaviGate* OVS can be installed immediately. Contact Gatekeeper Systems for currently available delivery times.

GKS Part Number: 5318-OV1-2

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Operational Data Shown on Your Maps

OVS can simultaneously display data from your company's multiple internal operational systems as well as from external sources. OVS combines operational data such as trouble calls, outages, vehicle locations, storm locations, and work orders with maps of your service territory and facilities.

Maps can be shown at a national, regional, state, or local level.

A simple map toolbar and powerful navigational elements provide users with an easy-to-use environment for locating and displaying the information they need.

PacifiCorp Operations Visualization System

OVS provides an easy-to-use graphical tool to view operational information through maps and reports.

Follow the links below for:
- More information about OVS
- Assistance from On-line Help
- Details about using our maps

For further assistance, contact:
Technical Support

Gatekeeper Systems
Applications and Systems for the Internet

Easy-to-use map toolbar

Powerful navigation options

Outage or work order locations

Thematically map service territories

Lat: 48.343597, Lon: -: | 1 : 13,717,330 | 1,101 × 1,115 (mi) | Trusted sites

Report Directly from the Map Interface

Data in the map is instantly available in a variety of ways.

Users can see "tooltips" under their cursor just by pointing at an object on the map. The tooltips can be customized with data from your corporate databases.

You can get a report on any object on the map simply by double-clicking on it. Reports can contain links to other objects on the map, to other reports, to Excel spreadsheets of detailed data, or even to photographs or other websites.

CADOPS Outage Report

Outage No	287417
Time Stamp	2002-07-13 20:21:46
Address	WEST ROY
District	MT OGDEN
Substation	WEST ROY
Feeder	WRY11
Outage Cmnt	
Customers Affected	67
Verified	

Double-click on map icons to produce rich reports from your operational databases

Tooltips under your cursor make important data instantly available

Outage No.: 287417
Reported: 20:21
Verified: YES
Customers Aff.: 2367

Reports can contain links to objects on the maps, or to additional reports

Extract detailed data as Excel spreadsheets

Lat: 40.962450, Lon: -: | 1 'Outages' selected | 1 : 13,717,330 | 1,101 × 1,115 (mi)

http://ovs.gatekeeper.com/scripts/redirect.pl?SCR=htmlreport.pl;RN=CadopsOutage;PK=287417 | Trusted sites
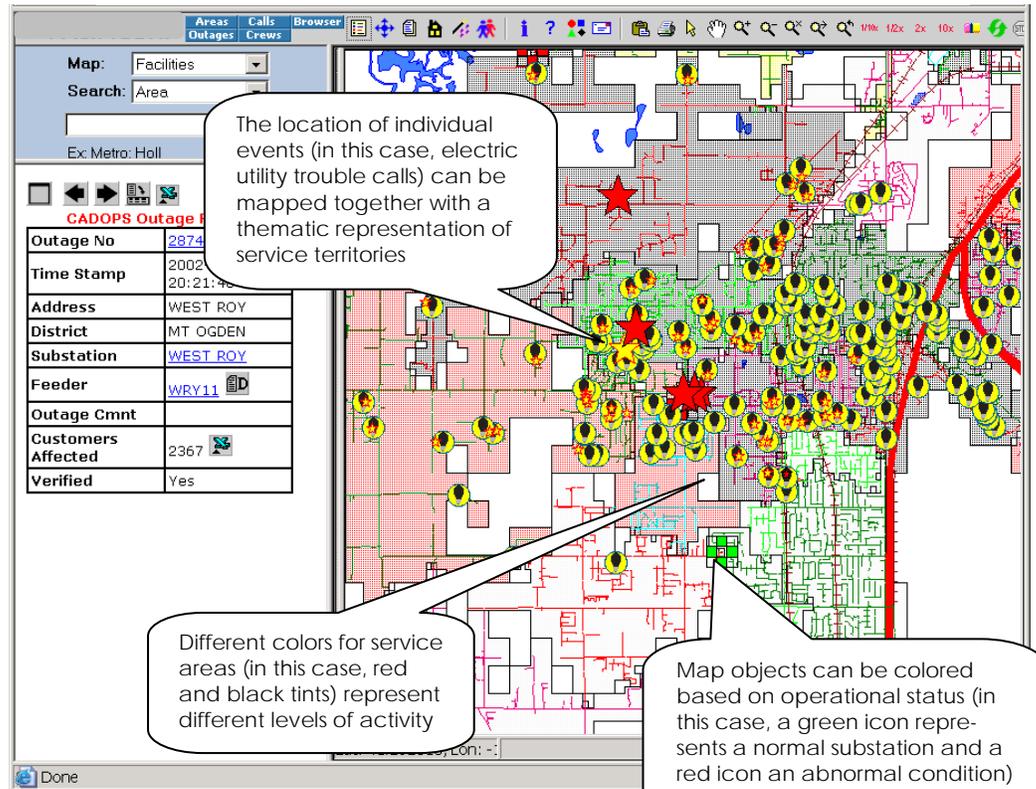
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Thematic Mapping

OVS provides pre-formatted thematic mapping of your operational data.
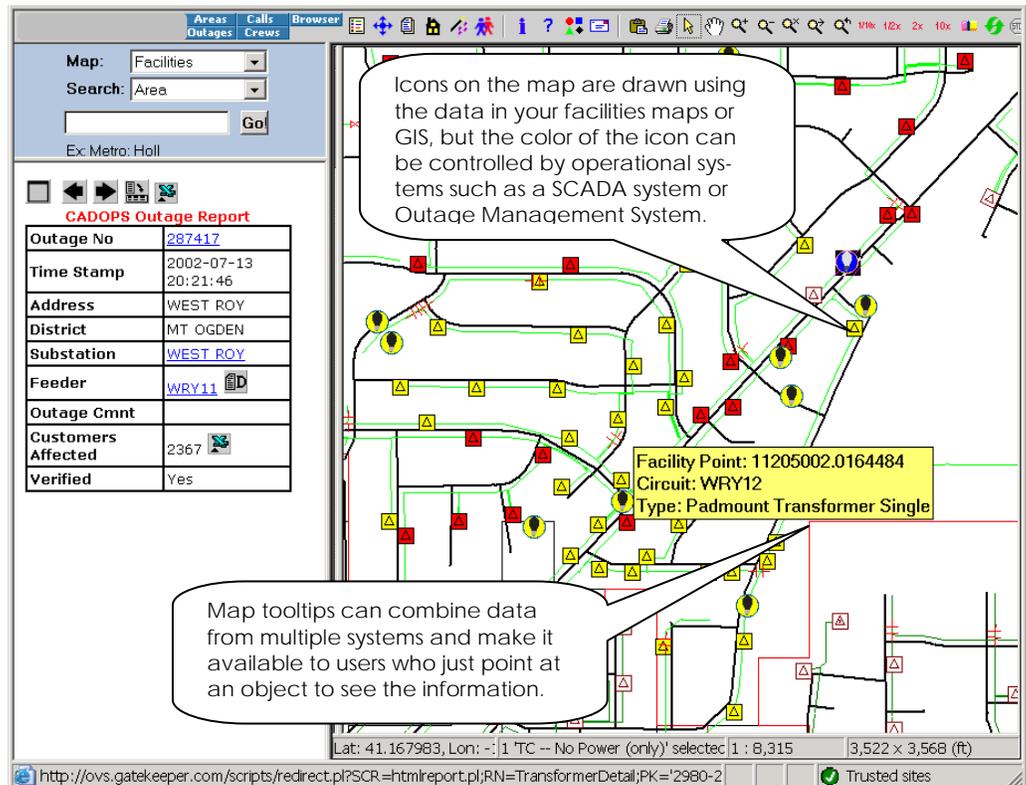
The OVS system automatically builds and maintains thematic summaries of your operational data such as trouble calls, outages, work orders, customer counts, or other data. These summaries are available via thematic maps, which can also show the operational details.

The location of individual events (in this case, electric utility trouble calls) can be mapped together with a thematic representation of service territories

Different colors for service areas (in this case, red and black tints) represent different levels of activity

Map objects can be colored based on operational status (in this case, a green icon represents a normal substation and a red icon an abnormal condition)

Combine Facilities Maps and Operations Data

Use data from operational systems to enhance the display of your utility basemaps.

OVS can combine the data from your mapping systems with data from an operational system such as a SCADA system, Outage Management System, Work Order System, or Maintenance Management System. The resulting maps contain much more information than is available from either system alone.

Icons on the map are drawn using the data in your facilities maps or GIS, but the color of the icon can be controlled by operational systems such as a SCADA system or Outage Management System.

Facility Point: 11205002.0164484
Circuit: WRY12
Type: Padmount Transformer Single

Map tooltips can combine data from multiple systems and make it available to users who just point at an object to see the information.

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Include External Information Systems

Data from systems outside your company can be displayed in your facilities maps.

Use data from external weather and lightning systems, vehicle location systems, or underground locate call centers ("Call Before You Dig") and show these information sources on a single map, together with your utilities service territories and

Show vehicle locations from an Automatic Vehicle Location System together with your facilities and service territories.

Name: CLD13
Services: 2260
Services Out: 0
Call Count: 5
Old Calls: 0
Status: Normal
Temp: 28
Wind: 9

Tooltip shows information from both internal systems (in this case, trouble calls and outages) and external systems (in this case, weather reports).

Powerful Tabular Area Browser

Many utilities are organized into a hierarchy of service territories, such as regions, districts, substations, and circuits. OVS includes a powerful Area Browser that can "drill down" through that hierarchy and report summarized and detail data on multiple dimensions of data.

For example, you can show summaries of trouble calls, outages, vehicle activity, work orders, and lightning strikes all in a single, powerful browser. Each object in the browser is associated with a service area and linked to its location on the map.

The Area Browser can be set to automatically refresh the display every few minutes. You can also generate both detailed and summary reports directly from the browser.

Display transactional data from multiple operational systems in a tree structure that matches your service area or operational hierarchy.

Area Browser toolbar lets you automatically refresh the display on a timed basis, zoom directly to an object on the map, or generate a report or Excel spreadsheet.

Click on a column header to sort the column, or click-and-drag to re-order the columns to suit your needs.

Data in the Browser comes directly from your internal corporate systems. Summary data is maintained automatically by OVS.

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Drill Down Into Operational Data

The Area Browser also lets you drill down into operational data. Use the tree control on the left to move up or down through your service territory hierarchy, the link from those objects back to the OVS maps and reports.

Summary Reports

OVS contains many summary reports built from the operational data in your corporate transactional systems.

OVS can summarize transactional information by service territory and display those summaries in easy-to-use web pages. Each summary report also links to more detailed reports and to the maps, so that uses can move from a summary report to the map view with a single mouse click.

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Use Detailed Parcel Maps

If your utility has detailed parcel data available (usually available from County agencies) you can display this data together with your facilities.

Data from your internal databases (such as your customer database) can be combined with data from the external parcel data sources to produce maps and reports that show your facilities together with parcel ownership details.

Time History Report

OVS also maintains time histories of transactional activity. You can use OVS to examine the history of activity at some time in the past, and study the data in time increments of an hour to a year.

Numbers in the reports can be linked to detail reports, or back to objects on the map.

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