Lucent Technologies
Bell Labs Innovations

Navis™ iOperations Software Portfolio

NavisAccess™ Dial 6.0

While new access technologies struggle to gain a foothold, dial networks keep going strong. As a voice and Internet service provider, you know dial networks are a business mainstay—yet you recognize that the services they carry are changing dramatically. New voice technologies —voice-over-IP, for example—present quality challenges to your network. And, with so much traffic and multiple services riding on your network, service delivery and service monitoring are becoming a real challenge.

The Next-Generation Network and Service Management Solution For Dial Networks

If the time, cost, and complexity of managing dial networks is taxing your business, Lucent Technologies can help. Our *NavisAccess* Dial element management system (EMS) gives you the tools you need to manage dial networks easily and cost effectively—so you can gain a competitive edge in your market. With *NavisAccess* Dial, you have the power to maximize and prioritize resources, boost quality, and support new revenue-generating services—all from a single platform.

NavisAccess Dial provides ground-breaking access management capabilities that enable you to monitor dial network resources and utilization at a service level—not just a physical device level. Going beyond the limited capabilities of traditional network management solutions, *NavisAccess* from Lucent Technologies introduces a next-generation management platform designed for a complete range of access services, including analog, ISDN and voice-over-IP (VoIP) services.

The sophisticated service monitoring features of *NavisAccess* Dial are based on a unique "call-mapping" mechanism, which gives you the tools you need to manage your service offerings—not just your network devices. With this service-oriented approach, you have the management support to deliver today's most rewarding services, including guaranteed Service Level Agreements (SLAs), high-priority services, and port wholesaling. *NavisAccess* Dial is the only management platform with the features and scalability needed to handle today's large and diverse networks.

Logical Call Mapping Enables Service-Level Management

To provide a business-oriented, service-level view of access networks, *NavisAccess* Dial incorporates advanced call-mapping features. With these unique capabilities, every call made to Lucent remote access servers—including MAX™, MAX TNT®, and APX 8000™—is associated with a specific service, service group, or customer, according to your preferences.

As a result, your operations staff has a real-time view of all services being delivered on the network, even if the services span multiple devices and locations. Call mapping also provides the basis for advanced performance monitoring and service enforcement, increasing your control over the cost and quality of the services you deliver.

Adaptive Performance Monitoring Provides Intelligent Service Tracking

NavisAccess Dial delivers another important advance in the area of threshold monitoring. Going beyond static threshold mechanisms, *NavisAccess* Dial uses a dynamic, fine-tuned approach to evaluate irregularities in network performance, whether above or below normal trend patterns. Instead of basing alerts on a single, fixed threshold, *NavisAccess* Dial provides "adaptive performance monitoring" that understands network utilization trends and sets expectations for network performance on a service-by-service basis, using historical data that is updated daily. Additional fine tuning is provided by "buffer zones" and user-established "tolerance factors" that prevent unnecessary alerts, while ensuring that you can set priorities for service parameters you need to monitor closely.

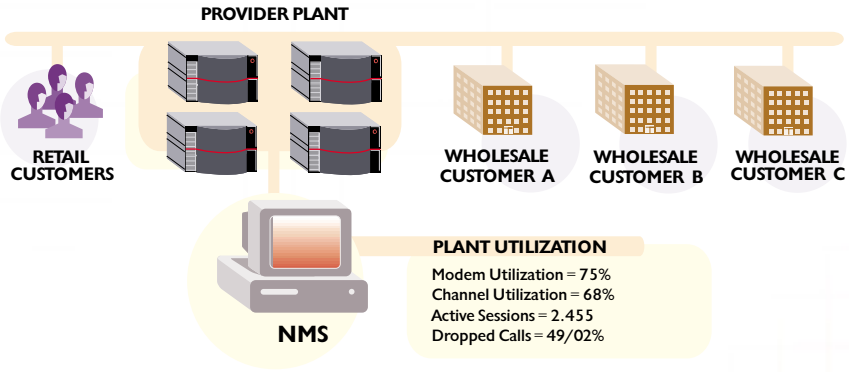
Distributed Service Enforcement Streamlines Support for Revenue-Generating Services

Service enforcement is a critical aspect of managing valuable dial services, such as SLAs, port wholesaling, classes of service, and time-of-day service. But the traditional RADIUS-based method of service enforcement is centralized, making intensive use of network and processing resources. Through a unique DNIS-based, distributed model of service enforcement, *NavisAccess* Dial allocates the service enforcement decision-across the access network. It's an elegant, automated approach that conserves centralized network resources.

Easy-To-Use Reporting Provides Customized Views Into Key Network Data

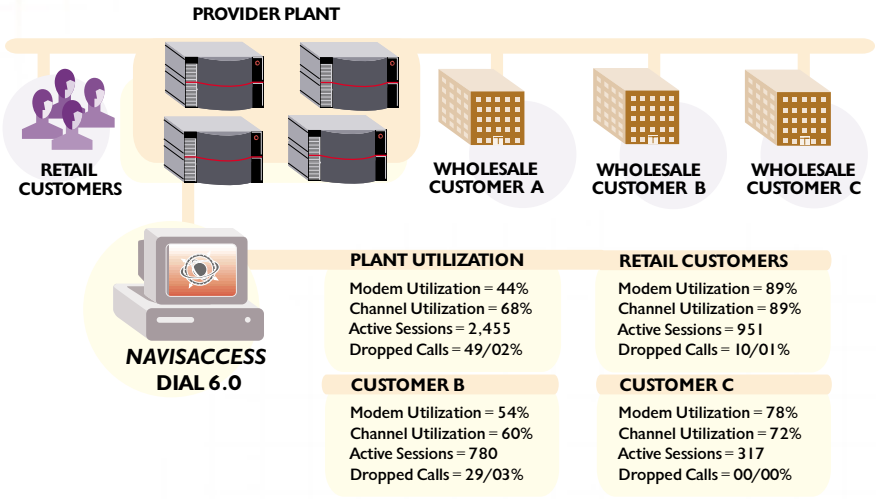
NavisAccess Dial makes it easy for you to review historical network data in the format you prefer. Report templates offer step-by-step options for generating customized views of call rates, disconnect codes, event histories, device hardware data, and more. Your operations team simply selects the desired data, time frame, services, or other parameters to generate a single report—or a report profile that can be assigned to multiple services. You can reuse these templates regularly or automate them to run at preset intervals.

Physical View Of The Network



A typical limited, device-level, physical-level view of the network using management tools that cannot map service. The NMS understands only the physical resources, and does not provide any information about how those resources are distributed among customers.

Service-Level View Of The Network With *NavisAccess* Dial



NavisAccess *Dial provides service-level call details, in effect providing a business oriented view of the network.*

System Architecture Ensures Easy Scalability And Investment Protection

NavisAccess Dial is a multiserver system providing extensive functionality in the areas of scalability and load sharing. As your network grows, you simply add *NavisAccess* servers—expanding management capacity easily without the cost of hardware platform replacement. With this distributed management architecture, *NavisAccess* Dial can manage networks of over a million access ports.

Service-Specific Modules Add Functionality

NavisAccess Dial provides full management for analog and ISDN dial services. Additional *NavisAccess* modules, such as *NavisAccess* VoIP, support other access services. Lucent continues to release additional modules to support the latest access network services.

Operating Specifications

NavisAccess Dial System Requirements

The following system requirements are approximate guidelines. System performance depends on factors such as number of services monitored, number of *NavisAccess* Dial workstations supported, frequency of report generation and so on. Please consult the *NavisAccess* Dial installation documentation for full details and component distribution information.

NavisAccess Dial on *Solaris*™

Operating System

Solaris 2.7 or 2.8 with designated patches applied.

Hardware Requirements

For managing up to 67,000 ports
Solaris Ultra 60
Dual CPU, 400 MHz, 2 GB of RAM
24 GB of hard disk space
4 GB of swap space

For managing up to 134,000 ports
Primary Server
Solaris Enterprise 450
4 CPU, 300 MHz, 4 GB of RAM,
24 GB of hard disk space
4 GB of swap space

For managing up to 201,660 ports
Two-server configuration
Primary Server
Solaris Enterprise 450
4 CPU, 400 MHz, 4 GB of RAM
4 GB of swap space, 24 GB hard disk with internal RAID controller

Secondary Server
Solaris Ultra 60
Dual CPU, 400 MHz, 2 GB of RAM, 4 GB of swap space, 24 GB of hard disk space

For managing up to 336,000 ports
Three-server configuration
Primary Server
Solaris Enterprise 450
4 CPU, 400 MHz, 4 GB RAM, 8 GB swap space, 54 GB hard disk with internal RAID controller

Secondary server #1
Solaris Ultra 60
2 GB RAM, 4 GB swap space, 24 GB hard disk

Secondary server #2
Solaris Ultra 60
400 MHz, 2 GB RAM, 6 GB swap space, 56 GB hard disk

For managing more than 336,000 ports
Consult your Lucent sales representative for customized installation requirements.

***Navis*™ iOperations Software** delivers innovative **world-class** software that enables service providers to increase **profits** through **rapid service deployment** and **operational excellence** in next-generation networks.

For additional information, please contact your Lucent Technologies Sales Representative.
You can also visit our Web site at http://www.lucent.com or contact the following Lucent Technologies Response Centers:

Asia-Pacific
Tel: +65-248-5441
Fax: +65-248-5501

China
Tel: +86-106522-5566

Europe, Middle East, Africa
Tel: +32-7022-2052
Fax: +32-25-582-990

Latin America
Tel: +1-305-569-3600
Fax: +1-305-476-7330

North America
Tel: +1-888-426-2252
Fax: +314-317-6480

NavisAccess, MAX, and *APX 8000* are trademarks and *MAX TNT is* a resgistered trademark of Lucent Technologies, Inc.
Solaris is a trademark of Sun Microsystems, Inc.

This document is for planning purposes only and is not intended to modify or supplement any specifications or warranties relating to Lucent Technologies products or services.

Copyright © 2001 Lucent Technologies Inc.
All rights reserved.
Printed in U.S.A.

Lucent Technologies Inc.
Software Marketing
07/01

Lucent Technologies
Bell Labs Innovations