



## Network Management & Control System for Broadwing Communications



*The world's first beautiful network.™*

Broadwing Corporation is the parent company of Broadwing Communications, LLC, an innovative telecommunications service provider, and Corvis Equipment Corporation, a developer of advanced optical networking equipment.

Broadwing provides data, voice, and video solutions enterprises and service providers including major telecommunication carriers.

Broadwing Communications' all-optical network is the newest generation in fiber optic cable, transmission and switching equipment.

They provide a unique solution for broadcasters and media companies. An inter-city network transports rich media data (HDTV, large video files), compressed or uncompressed.

The terrestrial optical network is based on the Net Insight Nimbra platform (DTM) compliant with Next Generation SDH/SONET and GMPLS standards.



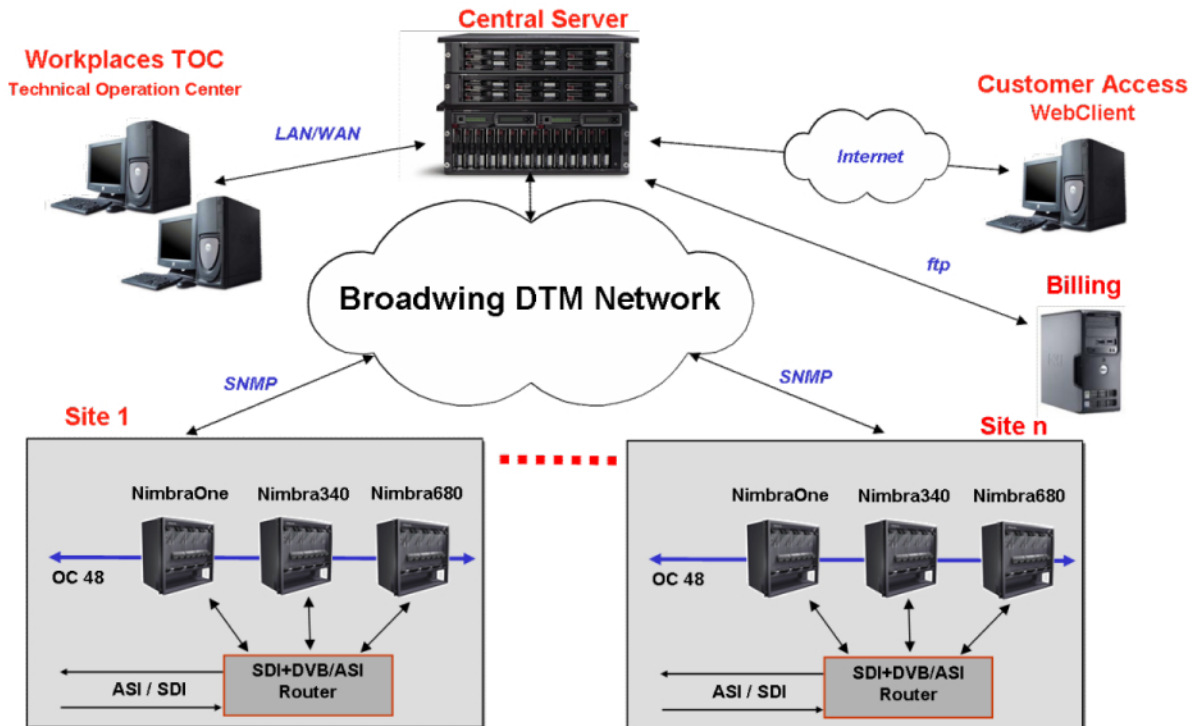
## The Network Management System BROVIS

Dimetis developed the Network Management System BROVIS based on Broadwing's special requirements. The system controls all Nimbra nodes within the network and establishes the SDI, ASI, E1 and Ethernet connections.

### Functions

- Network configuration
- Scheduling
- Bandwidth Management
- Point-to-point and Point-to-Multipoint connections for SDI, ASI and Ethernet
- Point-to-point connections for E1
- Building of Subnets
- Routing (path finding) through the network
- Establishing of connections (manual or automatic): Switching of Nimbra nodes and Leitch routers
- Permanent monitoring of all nodes, ports and connections
- Redundancy switching in case of failure
- Daily export of billing data (XML-File)

## Overview of the system BROVIS



## Solution

- The Network Management System is designed using a **Client – Server** model.
- **Central Server** is based on fault protected Server running Red Hat Linux.
- **Oracle** (version 9i) has been implemented as the central data base.
- The user **PC's** are based on Windows 2000/XP connected to the server over LAN.
- The whole **application** (server and client) is implemented in **Java**.
- **Customer access** is possible:
  - × Through a **web client**.
  - × **Interface** to customer's management system
- Communication and control is accomplished using **SNMP protocol**

## Dimetis Services

Dimetis provided the following in the development and deployment of the Broadwing Management System Brovis:

- Definition of functionality and specification
- System concept
- Software development
- Implementation, installation and integration in Maryland