

## Complete Network And Service Management Platform

- ✓ *End-to-End Management*
- ✓ *Manage Voice, Data and Video Services*
- ✓ *Comprehensive FCAPS*
- ✓ *Open Interface for OSS Integration*
- ✓ *Manages OSMINE-Certified Zhone Network Elements*
- ✓ *Scalable to Support Multiple Locations and Millions of Subscribers*

ZMS is a standards-based, carrier-class network management solution that provides management support for Zhone multi-service networks. The ZMS client-server architecture uses proven industry standard components such as an application server framework and a relational database to provide a robust platform. ZMS automates complex, tedious and error-prone tasks, thereby raising productivity, improving accuracy and reducing costs for operators.

### Client / Server Architecture

The ZMS client, called NetHorizon, provides an easy-to-use, GUI for operators to manage and troubleshoot Zhone networks. Maps and sub-maps represent regions, making it intuitive for network operators to drill down for views of chassis, cards, ports, logical interfaces and lists of services. Multiple client support ensures that many operators performing discrete management tasks can simultaneously use data from the ZMS Server.

The ZMS server provides a suite of management applications to support fault, configuration, performance, security and diagnostics functions. It communicates with the Zhone devices via industry-standard protocols such as SNMP and FTP/SFTP, using reliable mechanisms to ensure timely transfers of management information. Service, configuration, and subscriber data are stored in a relational database.

### Full Featured Management System

Zhone's ZMS is a full-featured management system including full FCAPS implementation (Fault, Configuration, Administration, Performance and Security). ZMS's FCAPS functionality enables quick turnup of devices, advanced tools for increased productivity, real-time traffic and service monitoring and historical data collection for trending and analysis.

### OSS Integration

ZMS OSS Gateway provides an open standards based Corba or XML interface for seamless integration into existing and new service provider Operations Support Systems (OSS). The interface provides for bi-directional transfer of management information for tasks such as automated flow through provisioning, inventory management, device configuration, capacity and status of various network entities.

## Technical Specifications

### Interfaces

- OSS Gateway
- Northbound Corba IDL
- XML
- Configuration, provisioning, status, inventory and capacity information

### Protocol Support

- SNMP V2c
- FTP
- TFTP
- SFTP

### Management

- IP connectivity for management
- In-band over ATM or IP
- Out-of-band via 10/100 Ethernet

### Operating Requirements

- ZMS & OSS GW Server
  - Solaris 2.9
  - Sun Fire T1000 (Not NEBS Compliant) or Sun Netra T2000 (NEBS Compliant) server or equivalent, 1 GHz, 8 core T1 CPU processor or better, 8 GB RAM and 2 x 73 GB free disk space, 2 power supplies, DVD-ROM drive
- NetHorizon client
  - Windows XP, Windows NT 4.0 or Windows 2000
  - 500 MHz CPU, 256 MB RAM, 50 MB hard disk space
- Database: Oracle 9i

## Ordering Information

ZMS-NMS-TR1	ZMS TIER 1 LIC. (1-5K); CLIENT/SERVER SW W/CONFIG, FAULT, REAL-TIME STATS & DIAG FUNCT & ORACLE DB
ZMS-NMS-TR1-STNDBY	ZMS COLD STANDBY TIER 1 LIC. (1-5K); ZMS AND ORACLE DATABASE, REQUIRES PURCHASE OF ZMS-NMS-TR1
ZMS-NMS-TR2	ZMS TIER 2 LIC. (1-50K); CLIENT/SERVER SW W/CONFIG, FAULT, REAL-TIME STATS & DIAG FUNCT & ORACLE DB
ZMS-NMS-TR2-STNDBY	ZMS COLD STANDBY TIER 2 LIC. (1-50K); ZMS AND ORACLE DATABASE, REQUIRES PURCHASE OF ZMS-NMS-TR2
ZMS-NMS-TR3	ZMS TIER 3 LIC. (50K+); CLIENT/SERVER SW W/CONFIG, FAULT, REAL-TIME STATS & DIAG FUNCT & ORACLE DB
ZMS-NMS-TR3-STNDBY	ZMS COLD STANDBY TIER 3 LIC. (50K+); ZMS AND ORACLE DATABASE, REQUIRES PURCHASE OF ZMS-NMS-TR3
ZMS-NMS-OSSGW	ZMS OSS GATEWAY CORBA IDL INTERFACE. REQUIRES CORRESPONDING VERSION OF ZMS NMS.
ZMS-NMS-TR1-TR2-UPGRADE	ZMS TIER 1 (1-5K) TO TIER 2 (1-50K) LICENSE UPGRADE
ZMS-NMS-TR1-TR2-STNDBY-UPGRADE	ZMS STANDBY TIER 1 (1-5K) TO TIER 2 (1-50K) LICENSE UPGRADE
ZMS-NMS-TR1-TR3-UPGRADE	ZMS TIER 1 (1-5K) TO TIER 3 (50K+) LICENSE UPGRADE
ZMS-NMS-TR1-TR3-STNDBY-UPGRADE	ZMS STANDBY TIER 1 (1-5K) TO TIER 3 (50K+) LICENSE UPGRADE
ZMS-NMS-TR2-TR3-UPGRADE	ZMS TIER 2 (1-50K) TO TIER 3 (50K+) LICENSE UPGRADE
ZMS-NMS-TR2-TR3-STNDBY-UPGRADE	ZMS STANDBY TIER 2 (1-50K) TO TIER 3 (50K+) LICENSE UPGRADE



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