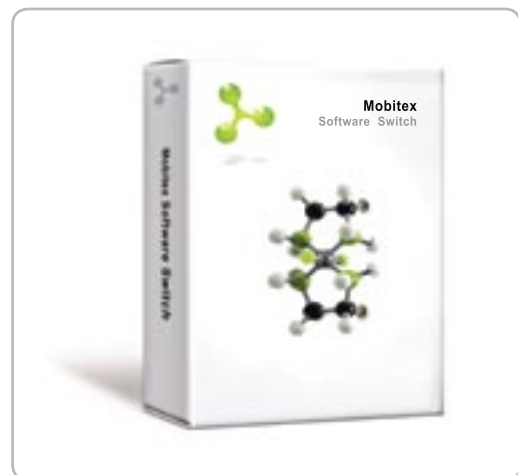Mobitex™
Switch

Software Switch

The Next Generation Mobitex Switch

The latest generation of the Mobitex switch, is a true software based switch running on a standard SUN Solaris hardware platform. It replaces MX based switches and consolidates the proven and reliable Mobitex switching functions (i.e. the MOX, the IAS gateway, the network location servers DRR and NLS) onto one single platform. It combines usability, performance, reliability and flexibility to suit both large and small networks.

The Software Switch* provides efficient and reliable switching of data packets between radio base stations and hosts (fixed terminals). It is connected to the NCC (Network Control Center) and other Mobitex switches over the Mobitex Backbone and supports connectivity to base stations and hosts through both TCP/IP and X.25.

The SUN Solaris platform ensures quick, easy and standardized installation and upgrades of the switch. The Software Switch can be configured to meet each customer's needs concerning switching capacity, connectivity and functionality.
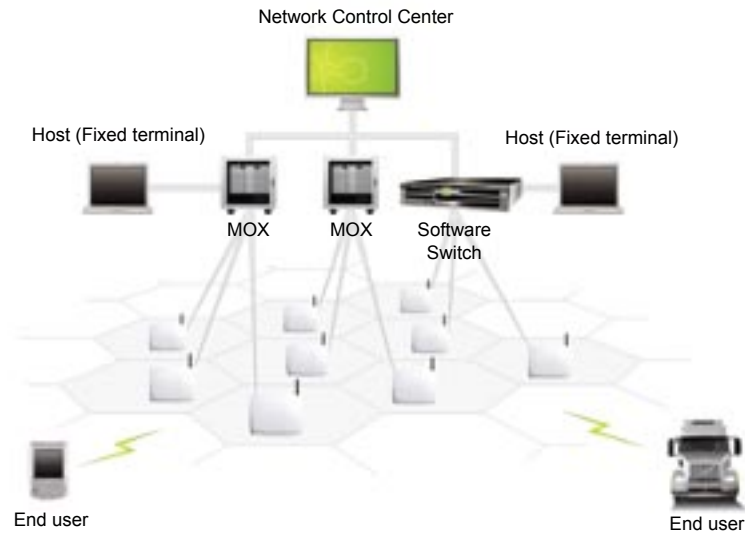
Supervision and alarm monitoring are performed remotely via standardized SNMP management software.

A wide range of statistical data on performance and utilization is constantly updated and available to facilitate easy network maintenance and operation with the highest efficiency. The configuration parameters of the switch can be changed remotely and on-line through the NCC, ensuring uninterrupted service for the end-users.

The Software Switch is compatible with all other Mobitex nodes using MX/EX hardware, enabling a smooth migration for existing operators.

The Software Switch was previously known as the MSN.

Network Control Center

Host (Fixed terminal)   Host (Fixed terminal)

MOX   MOX   Software
                Switch

End user   End user

Technical specifications

The switch hardware is based on the SUN NETRA 240[1] carrier-grade server, offering hot-swappable hard drives and redundant hot-swappable power supplies in a rack-optimized 2U form factor. It is available in a range of different power configurations, including 110/220V AC and 48V DC.

Standard hardware configuration[1]

SUN model	NETRA 240
Operating system	Solaris 10
Number of CPUs	1
Ram Memory	1 GB
Number of Ethernet ports	4

Additional Requirements for X.25 Support

1-2 SUN High Speed Serial Interface (HSI) with 4 ports per adapter and 2 Mbps per port (Max 2 adapters) Solstice X.25 9.2

Switch Capacity

Number of subscribers	up to 250 000 (licensed)
Packet switching capacity	up to 1 000 000 pph (licensed)
Number of connected Base stations,	up to 200
Fixed terminals	up to 512

Switch Connections

Switch Connections	Recommended protocol	Physical Interface
NCC- Network Control Center	TCP/IP	10/100/1000-Mbps BaseT
MOX/MHX - Mobitex switch	TCP/IP	10/100/1000-Mbps BaseT
BAS - Radio base station	TCP/IP (XOT RFC 1613) or	10/100/1000-Mbps BaseT
	X.25	RS-449 with DB37 female connector
FST - Fixed terminal	TCP/IP (MDOT) or	10/100/1000-Mbps BaseT
	X.25	RS-449 with DB37 female connector

Environment

Temperature range	5° C to 40° C (41° F to 104° F)
Humidity	5% to 85% relative humidity, non-condensing

1. For a detailed hardware specification, please see www.sun.com for more information.