

MapInfo® MapXtend™

ROBUST DEVELOPER TOOL FOR CREATING LOCATION-BASED WIRELESS APPLICATIONS

CREATE LOCATION-BASED APPLICATIONS RUNNING ON WIRELESS HANDHELD DEVICES. MAPXTEND IS THE IDEAL TOOL FOR ORGANIZATIONS ACROSS MANY INDUSTRIES, IN BOTH THE PRIVATE AND PUBLIC SECTOR, TO BRING WEB-BASED APPLICATIONS TO THE MOBILE INTERNET. AN EXTENSION TO MAPINFO® MAPXTREME® MAPPING SERVER, MAPXTEND PROVIDES MOBILE FIELD STAFF LIVE ACCESS TO THE MOST UPDATED CORPORATE DATA ON EQUIPMENT AND CUSTOMERS, HELPING INCREASE EFFICIENCY AND IMPROVE SERVICE.

BENEFITS

- ▶ Flexible, Scalable—Applications built using *MapXtend* can run in multi-technology, distributed environments and scale to meet the needs of thousands of users.
- ▶ Seamless Integration—*MapXtend* leverages MapInfo's entire suite of market-proven internet geocoding, routing and mapping technologies to provide location-based intelligence for enterprise field staff.
- ▶ Improved Efficiency—Mobile field staff using applications powered by *MapXtend* can handle more service calls due to better scheduling and routing, and last-minute calls can be added and assigned to the nearest field technician.
- ▶ More Satisfied, Loyal Customers—Improved, faster customer service and more reliable field equipment leads to satisfied, loyal customers.

INTERNET AND WIRELESS TECHNOLOGIES CONVERGE

This convergence creates a significant opportunity for organizations to build a competitive advantage by deploying their enterprise applications via handheld devices to mobile field staff.

The common thread among wireless applications is location-based data. Field staff need to relate their present location to where they are going next, and where clients and assets are located. They also need access to important data associated with each customer or piece of equipment they are servicing.

EXTEND WEB-BASED APPLICATIONS TO THE MOBILE INTERNET

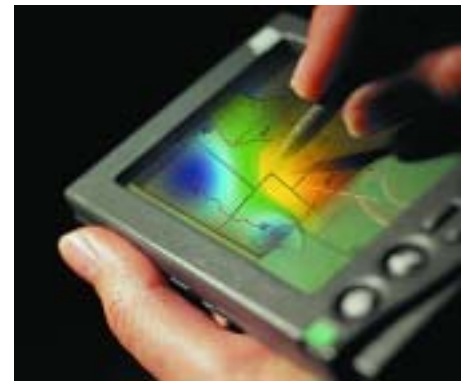
Mobile staff from a broad range of industries in both the public and private sectors can connect with departments inside organizational walls, linking in real-time to the latest information from the field. *MapXtend* allows access to centralized data and provides users with the ability to view, query, edit and collect data while in the field improving overall efficiency and productivity.

SALES

FIELD INFORMATION SYSTEM

Query and update databases for information on:

- Existing Customer
- Possible Customers
- Competitors
- Demographic Reports
- Sales Areas/Territories



SERVICE/OPERATIONS

CALL-BEFORE-YOU-DIG

Access, visualize and update data on underground infrastructure to avoid costly cuts in lines.

DISASTER MANAGEMENT

- Log where the problem is or it's extent
- Visualize this information in real-time in the field.
- Distribute by email or download the client application from the web.

INFRASTRUCTURE REPAIR

- Identify and visualize location of repairs, property, equipment, and service centers.
- Capture and update data in the field.
- Highlight error/changes.
- See how to get there with map displays and driving directions.

NETWORK ALARMS RESPONSE

Access location, severity and status of network alarms to prioritize repairs. By seeing all network alarms in the local area, field technicians have a clear view of the extent of a problem and its possible cause.

ONE-STEP PROVISIONING IN THE FIELD

Access centralized provisioning systems to save time and money.





MAPXTEND FEATURES

The *MapXtend* API offers rapid development, scalability, and flexibility to build and deploy wireless handheld applications quickly, efficiently, and securely. Its architecture follows a 3-tier model, with specific *MapXtend* packages designed for each tier.

• **Developer Tool**

Provides a convenient and secure framework for creating applications for wireless handheld devices.

• **Web to Wireless**

Extends *MapXtreme* browser-based applications on to wireless handheld devices.

• **Real-Time Access to Data**

Allows live access to centralized data anywhere from the handheld device.

• **Two-Way Communication**

Two-way communication between the handheld device and the server over the Internet allows the user to view, query, edit and collect data in the field.

• **Device Independent**

Supports any wireless phone, Palm or Windows CE client supporting J2ME, as well as WAP-based phones and standard Internet browsers.

• **Powerful Client Functionality**

Allows developers to create smart applications with feature-rich user interface.

• **Local Data Storage and Retrieval**

Allows the user to work disconnected or off-line. Data can be stored on the client device and retrieved later, even after the application is terminated or the device has been turned-off.

• **Caching**

Supports caching of both raster and vector data leading to improved performance and portability. Specific pre-defined views of data that need to be accessed often can be cached on the server.

• **Java™ End-To-End**

Built upon a Java architecture:

Server: Java 2 Enterprise Edition (J2EE)

Client: Java 2 Micro Edition (J2ME)

• **Seamless Integration**

Leverages other MapInfo Internet technologies, including *MapXtreme* mapping server, MapInfo® *MapMarker*® geocoding engine and the MapInfo® *Routing J Server*.

• **Wireless Technology Independent**

Operates worldwide irrespective of type of network (i.e. CDMA, GSM, PCS, etc).

• **MapXtend Administrator**

Conveniently assists application developers or system administrators in configuring the server and deploying custom services.



SPECIFICATIONS

SUPPORTED COMPONENTS AND VERSIONS

This section describes all the devices and software MapInfo has tested. As a Java end-to-end solution, *MapXtend* may operate on other operating systems or devices.

PDA DEVICES

- Handspring Visor (running PalmOS 3.5)
- Palm IIIc (running PalmOS 3.5)
- Palm V (running PalmOS 3.5)
- HP Jornada 540 (running Windows CE 2.1 or greater)
- COMPAQ iPAQ (running Windows CE 2.1 or greater)

DEVICE SOFTWARE

- MIDP for Palm OS
- PersonalJava 1.2

PHONE DEVICES

- Motorola i85s, i50sx

PHONE SOFTWARE

- J2ME MIDP 1.0 (Java 2 MicroEdition for JavaPhone)
- WAP WML v1.1

OPERATING SYSTEMS AND ENVIRONMENT

- Windows 2000
- Windows NT Workstation or Server 4.0
- Sun Solaris 2.6 or 2.7

WEB SERVERS AND SERVLET ENGINES

Any web server supporting Java Servlet 2.2 API

BROWSER SUPPORT

- Microsoft Internet Explorer 5.0 or higher
- Netscape Communicator 4.6 or higher

MAPINFO SOFTWARE

For any MapInfo software package, please check the documentation for Java VM certification.

- *MapXtreme* Java Edition v3.1 and v4.0
- *MapMarker J Server* v2.1.1
- *MapInfo Routing J Server* v1.5 and 2.0.