

# mobilepipes

**Syndicated Methods – MobilePipes**

## **Technical Overview**

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**Prepared For:  
MobilePipes Customers & Application Developers**

## Overview

MobilePipes is an enterprise software framework that allows developers to quickly develop, track, and manage mobile software services and application integrations across multiple devices. Its flexible architecture runs on a robust server solution which allows for straightforward integration of custom client code while still integrating into core tracking mechanisms of the server software.

MobilePipes was created with the developer in mind. By introducing the flexibility and processing power that developers have become accustomed to on desktop and web applications, MobilePipes makes the transition easy to building the communication channels that integrate with any mobile device. Careful attention has ensured that developers will be up and running with MobilePipes with minimal effort and experience shorter development cycles allowing for faster project development at a lower cost.

## Technical Objectives

MobilePipes was designed to be a hub for mobile applications servicing data collection, usage statistics, and server side processing. The core software exposes a communication layer that allows mobile devices to connect with a server side processing engine. This engine exists to collect data and issue commands to custom modules which in turn perform any processing required by that application. As a result, developers and the business gain crucial advantages. Developers have a more robust and scalable framework that allow them to write algorithms and business logic in a more powerful environment. Because the solution is hosted in a distributed location MobilePipes is able to track any piece of information that is meaningful to your business. This opens the possibility for intelligence around mobile applications that is not found in any other mobile platform. MobilePipes is often used to track the following information:

- Where applications are being used.
- How often they are being used.
- The number of active users for an application.
- Growth of new users over time.

This is functionality customers receive out of the box and is only an example of Meta Data that an organization can collect. MobilePipes is able to be configured to track and report any information that an organization may require.

## Mobile Market

Software and hardware vendors have brought the mobile market to a level of maturity that far surpasses novelty. Information Technology has seen the rise of mobile phones and PDAs take on adoption in waves of popularity. The consumer market has seen the most change. With the explosive growth of smart mobile devices, consumers around the world are communicating and running software unlike ever before. Within recent years Information Technology departments are also receiving requests from their organizations to create mobile applications. Although this software is feature rich on the device itself, it operates in a vacuum. Mobile applications exist in a disconnected fashion and connect to the internet on rogue networks. This disconnected nature prevents distributors of mobile software from gaining intelligence about how their software is being used. Furthermore, it poses major productivity issues for these vendors. The current state of mobile applications forces an organization to face the following questions: How do I share this application across multiple mobile platforms? How can I build the logic of my application to exist in a distributed location?

## Server Solution

MobilePipes answers these questions with a well known pattern in the software industry. Through a distributed architecture the challenge of managing the logic behind mobile applications is answered. Similar to a web application, MobilePipes allows mobile devices to connect to the server for processing. This is achieved through Service Oriented Architecture (SOA) that is divided into two core competencies. The first well known competency is achieved through the industry standardized SOAP protocol.

The architectural direction behind the MobilePipes software is based on understanding the needs of application developers working on a multitude of devices, each with their own APIs and language. This constraint brought about the second competency of the SOA layer to include Plain Old Xml Services (POX). Using POX, MobilePipes ensures the freedom of being able to pass the simplest of messages from mobile applications to the server applications. In addition to the shear processing power, MobilePipes also has a Control Panel that allows developers and team members to obtain reports regarding MobilePipes statistics as well configure key variables of the MobilePipes solution.

## Adaptive Customization

Aside from these core objectives the solution was built with flexibility in mind. Through an open API developers can process any custom code that is required. Custom Modules can be created that track whatever information is passed to it. These mechanisms also support for any integration with internal or external software. Modules are designed by developers and implemented on the server. Mobile applications can then issue a request over the SOA layer to be executed on the server.

## Software Requirements

MobilePipes is largely built on top of Microsoft technologies. The complete software package comprises a Web Service layer, application layer, and data layer. The following list outlines the requirements for running MobilePipes and the Control Panel:

- **Microsoft .NET Framework 2.0 or greater**
- **Microsoft SQL Server 2000 or greater**
- **Microsoft Windows Server 2000 or greater**
- **Internet Information Services 5.0 or greater**

*NOTE: Currently, MobilePipes is built on SQL Server for the database layer. The server software is abstracted enough however in the core components to support other database technologies in future releases and can be accommodated upon request.*

## Obtaining Licenses

Licenses and full MobilePipes documentation are available by contacting Syndicated Methods:

Phone: 858-201-6876

Fax: 415-727-4016

Contact Sales Email: [sales@syndicatedmethods.com](mailto:sales@syndicatedmethods.com)

Contact Sales Website: <http://www.syndicatedmethods.com/contact/default.aspx>

Trial licenses are available upon request which allow clients to try a full version of MobilePipes for a limited period of time.