



Calem Mobile Solution

1 Executive Summary

CalemEAM is an open source software provider for enterprise asset management (EAM) and computerized maintenance management systems (CMMS). Using popular open source technologies such as Apache, JavaScript and PHP, CalemEAM Enterprise Edition, Calem Enterprise, is delivered with source code and can be easily customized to fit customer business processes and/or integrated with existing applications.

Calem Mobile Solution allows customers to use CalemEAM from mobile devices such as mobile phones and personal digital assistants (PDAs). The solution uses the Java Platform Micro Edition (JavaME), the most ubiquitous platform for enterprise mobile solutions.

Calem Mobile Solution is available free-of-charge for customers of Support Services of Calem Enterprise.

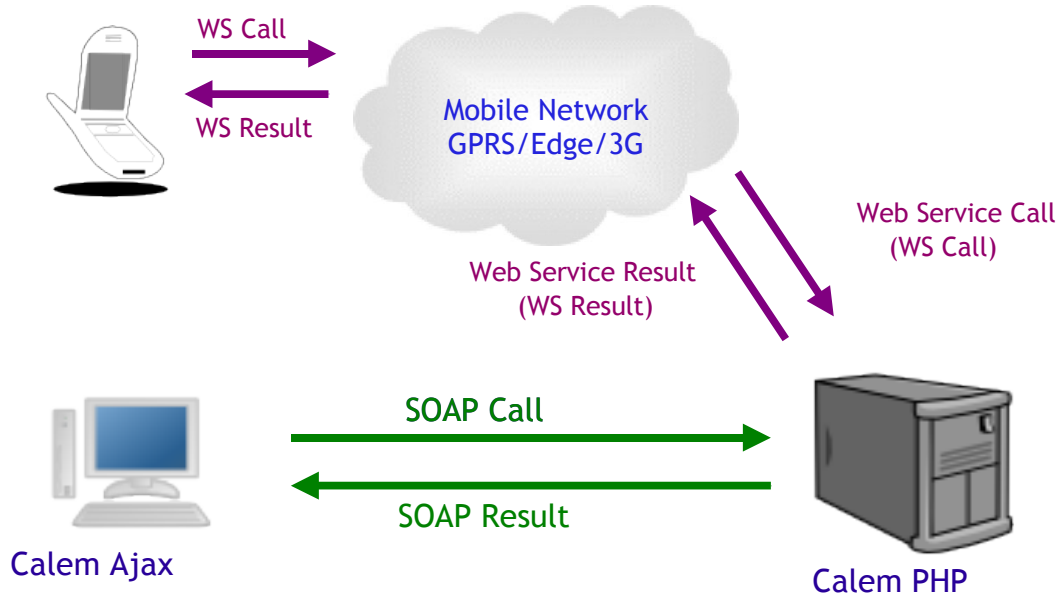
2 Calem Mobile Solution

Calem Mobile Solution allows customers to deploy multiple mobile applications serving CalemEAM to users with different business needs. The solution consists of the following modules:

- Calem Mobile Client
- Calem Mobile Profiles
- Calem Mobile Web Services

2.1 CALEM MOBILE CLIENT

Calem Mobile Client is built with JavaME, the most pervasive platform of industrial strength for developing enterprise mobile applications. Furthermore, the requirements of JavaME technologies are minimized so the Mobile Client can be deployed on a wider range of mobile devices. The Mobile Client uses Hessian binary web service protocol to communicate with CalemEAM servers.



2.2 CALEM MOBILE PROFILES

Calem Mobile Profiles allow customers to deploy multiple mobile applications based on their business needs. A Calem Mobile Profile defines a mobile application with user screens and configurations for a group of CalemEAM users performing similar business tasks. A profile for field technicians is shipped with Calem Mobile Solution, which includes user screens for field technicians to browse assigned work orders (screenshot below), view work order specifications and complete work orders on the spot.

EAM My assignment		
1	100-001	Open
Weekly inspection		
2	100-001	Open
Office cleaning		
3	100-001	Open
Replace air filters		
4	100-001	Open
Ceiling hazard		
5	100-001	Open
Server room ventilation		
6	100-001	Open
Ventilation noisy		
7	100-001	Open
Spare chairs needed		
8	100-001	Open
Thermostat is not working		
10	100-001	Open
Menu		Refresh

2.3 CALEM MOBILE WEB SERVICE

Calem Mobile Solution uses Hessian binary web service protocol for the Mobile Client to communicate with CalemEAM servers. The Hessian protocol is created by Caucho Technology for implementing web services without protocol complexity as in SOAP. Its small footprint is a neat fit for Calem Mobile Client. The use of Hessian protocol in Calem Mobile Client and Calem servers extends the service oriented architecture (SOA) of CalemEAM to serve Hessian in addition to SOAP.

3 Deployment Planning

Customers planning to deploy Calem Mobile Solution should review their mobile needs of CalemEAM users based on the user groups in CalemEAM. To deploy Calem Mobile Solution to field technicians customers can use the profile for field technicians shipped by CalemEAM. To deploy Calem Mobile Solution to groups other than field technicians customers may consult with the Professional Service Group of CalemEAM to define new profiles.

4 Frequently Asked Questions

4.1 What are the technical requirements of mobile devices to run Calem Mobile Clients?

The requirements include JavaME CLDC v1.0 (Connected Limited Device Configuration) and MIDP v2.0 (Mobile Information Device Profile). No additional JSRs (Java Specification Requests) are required.

Major device vendors (such as Nokia, Motorola and Research in Motion) all have phones/PDAs supporting CLDC v1.0 and MIDP 2.0. Vendors licensed JavaME technologies can be found at:

<http://java.sun.com/javame/licensees/index.jsp>

4.2 Does Calem Mobile Client run on Windows Mobile?

Yes, Calem Mobile Client runs on Microsoft's Windows Mobile. Windows Mobile does not support JavaME natively. You need to deploy a JavaME from a 3rd party such as J9 from IBM.

4.3 What service of my mobile carrier is required for my phone to use CalemEAM?

A data service plan with your mobile service provider is required. The data service plan must allow your phone to access internet via HTTP.

4.4 Is Calem Mobile Client Open Source?

Calem Mobile Client is not open source. Some modules of Calem Mobile Client will be open source. For instance the localization module of Calem Mobile Client is an open source project (CalemEAM MicroLocale) in Google Code.

5 Contact CalemEAM

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