

Mobile GIS How to Get There from Here

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Overview

- ➔ • Introduction
 - What is Mobile GIS?
- Developing Mobile GIS Applications
 - Architectures, Development Platforms
- Conclusion
 - Example Mobile GIS System

What is Mobile GIS?

- GIS on a Mobile Device
- Examples
 - Work Order Dispatching
 - GASB34 Inventory
 - Pipeline Inspection

Why Mobile GIS?

- Field Data Access
- Remote GIS Functionality
- Real-time Data Capture

Why *not* Mobile GIS?

- Limited Hardware Resources
- Limited Software Available
- Limited Connectivity

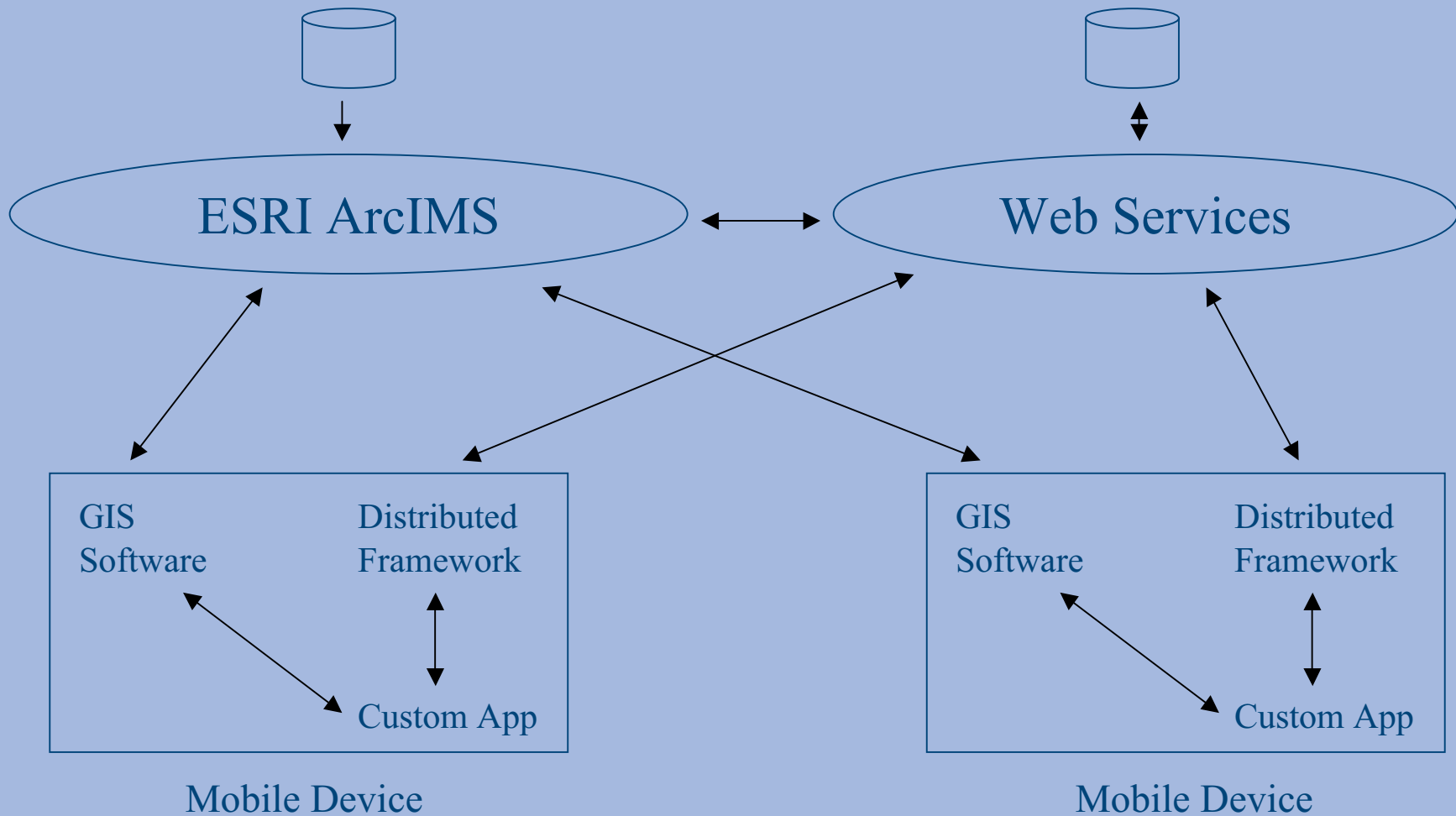
Mobile Device Trends

- Increasing Processing Power
- Increasing Memory
- Increasing Screen Size
- Increasing Wireless Connectivity
- Increasing Sophistication of OSes and Software
- Better UIs
- Decreasing Cost of Hardware, Accessories

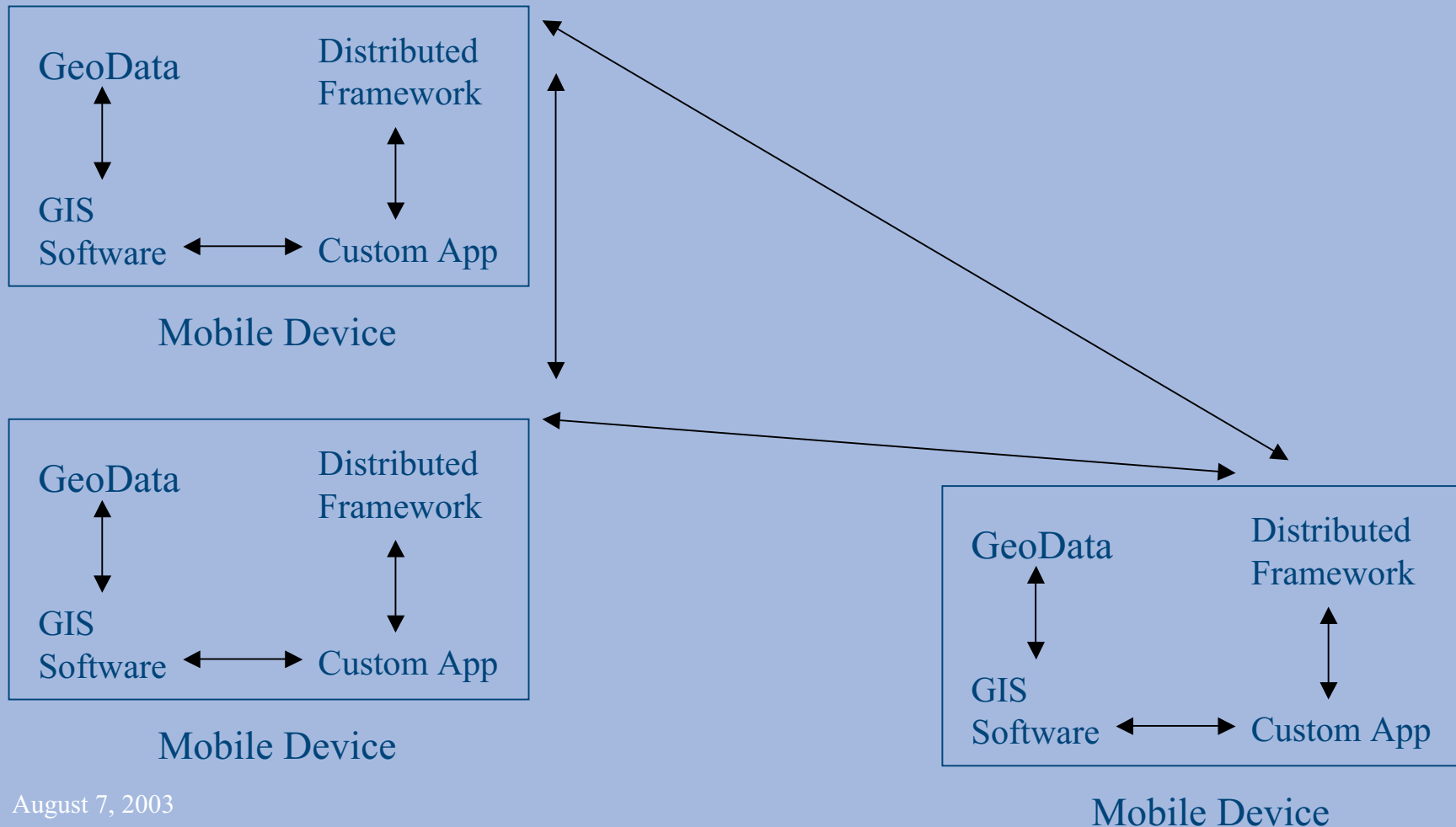
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Architecture: Client-Server



Architecture: Peer-to-Peer



Platform: J2ME

- Java for Mobile Devices
- Configurations
 - CDC
 - CLDC
- Profiles
 - MILP
 - FP
 - PP
 - PBP
- <http://java.sun.com/j2me/>

Platform: .NET CF

- .NET for Mobile Devices
- Develop as Standard .NET Application
- Configure Build Properties to Deploy to Mobile Device
- <http://msdn.microsoft.com/vstudio/device/compact.aspx>

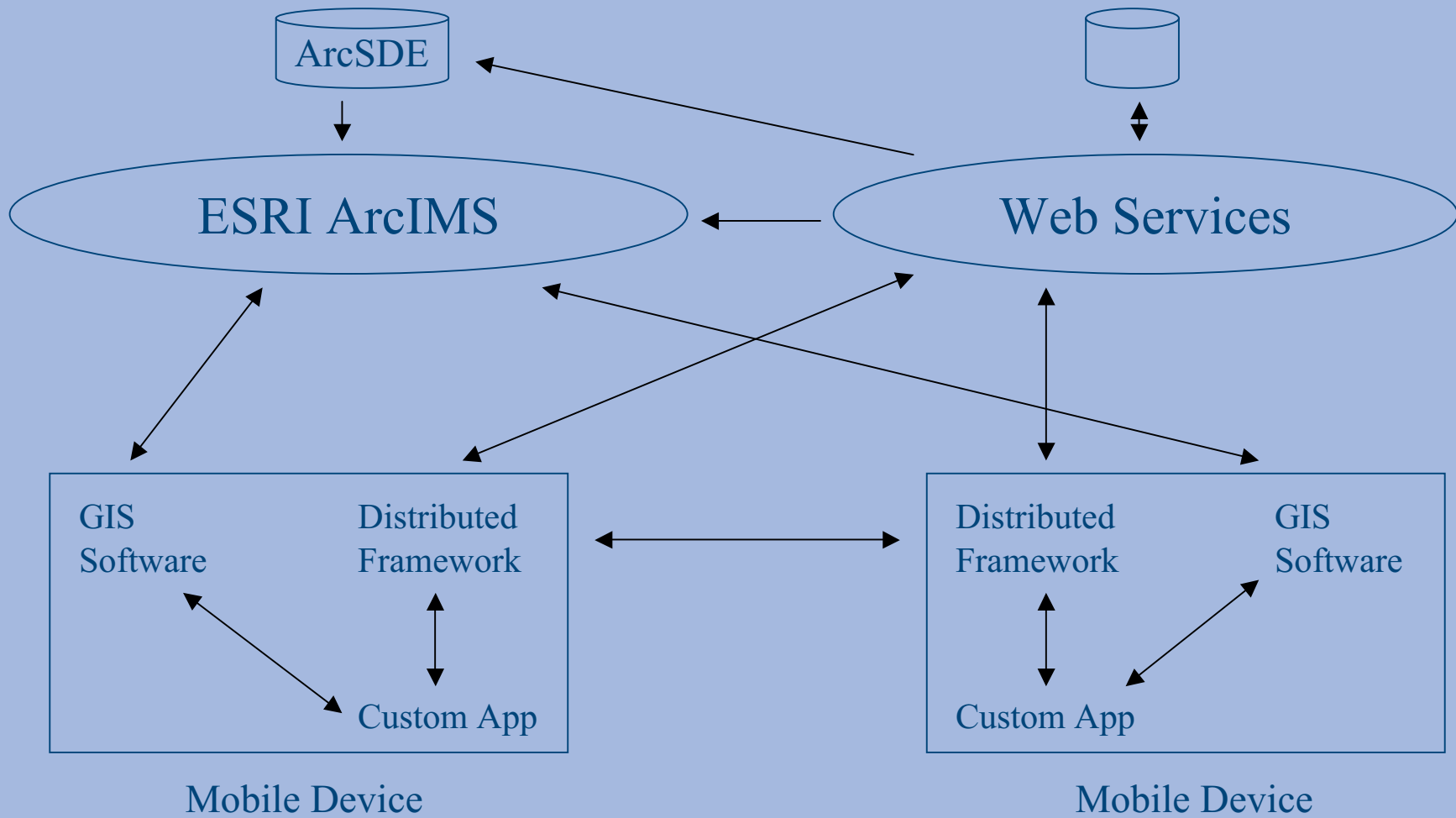
Lite GIS Software: ESRI ArcPad

- ArcPad 6.0.2
- ArcPad Studio
 - Custom Toolbars
 - Custom Forms
 - Scripts
 - Applets
- <http://www.esri.com/software/arcpad/index.html>

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Mobile Oil Spill Response System



Conclusion

- Hardware, Software Trends Making Mobile GIS a Reality
- Multiple Options for Development Platforms
- Robust, Reliable Mobile GIS Systems

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