SAP HCP
Using HCP for Mobile Apps

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# SAP HCP – Webinar Series 4 SAP User Groups

## Moderator: Jos Houben

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Agenda

- Hana Cloud Platform
  - Usage scenarios
  - Mobile application types
- SAP Mobile Platform
- SAP Mobile SDK
Hana Cloud Platform
- Integrate, extend and build

- Applications
- Extensions

- S/4 HANA
- IoT Platform

- SAP BS, CRM, HR, etc

- 3rd Party

- C4C
- Sf
- Concur
- Fieldglass
- Ariba
- 3rd Party

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Usage scenarios
- Externalize on-premise applications

One major part of integrating and extending applications is the externalization.

- **Traditional on-premise systems**
  - Externalize using middleware and proxy

- **Hana Cloud Platform**
  - Externalize using Hana Cloud Connector
    - Outbound encrypted connection
    - Individual, configurable, app specific connections
    - Additional security and authentication options
Mobile application types

**Web App**
- HTML5 + adaptive design

**Hybrid Mobile App**
- HTML5 inside a native wrapper
- Apache Cordova

**Native App**
- Development in device specific, native programming languages
- Code specific to Device OS
Mobile application types - differentiation

<table>
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<tr>
<th>Feature</th>
<th>Web App</th>
<th>Hybrid Mobile App</th>
<th>Native App</th>
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<tbody>
<tr>
<td>Browser</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Native device functions</td>
<td>○</td>
<td>●</td>
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<tr>
<td>Security options</td>
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<td>Offline capable</td>
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<td>Push capable</td>
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<tr>
<td>Governance</td>
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<tr>
<td>Mobile capabilities</td>
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This is an illustration only. The suitability of each application type is subject to individual project considerations.
SAP Mobile Platform
SAP Mobile Platform

- **Develop apps**
  - Hybrid (HTML5-Cordova)
  - Native
  - Meta Data Driven apps (Agentry)*
  - Online / offline, push, …

- **Run applications**
  - SAP Fiori Mobile (e.g. My Inbox)
  - Custom apps
  - Mobile qualities
  - Manage, secure, report, …

*Apps based on SMP 2.3 or older versions may require some changes to run on SMP 3.0
Mobile Platform
- Offline and Push

OData Offline capabilities
- Offline apps with Hybrid SDK and native SDK
- Also for SAP Fiori

Push support
- Native notification integration (APNS, GCM, WNS)
- Back end system can send PUSH notifications easily
Mobile Platform
- Application management

**Application registration**
- Every app on every device can be uniquely identified
- Enables Push notifications

**App usage and versions**
- What app version are in the field on which devices
- Number of connections
- App usage details (clicks on functions etc)
Mobile Platform
- Governance

Security
- Security Profiles – authentication
- Client policies – password, logging, device access
- Services Whitelist – defines access to services

Maintainability
- Resource bundles – apps can download resources (e.g. config data, localization settings, …)
- In-place updates – Hybrid apps can be updated via HCPms
- Remote logging, usage reporting, end-to-end tracing, …
Mobile SDK

SAP Mobile Software Development Kit
SAP Mobile SDK - Components

Hybrid SDK (Kapsel)
- Plugins for Apache Cordova for building HTML5 apps.
- Provides mobile qualities for developers – e.g. logon, security, offline, push, native integration, …

Native SDK
- Resources for developers to build native applications and include mobile platform features

Other
- MDD – Meta Data Driven apps. Used by the SAP field service applications (Syclo)
- Mobilizer – For mobile banking and payment
- REST API – Platform interface for apps that do not use the mobile SDK
SAP Fiori on mobile devices
- Fiori Mobile context

1. Fiori Mobile (Fiori Client app using Mobile Platform), 2. Fiori Client without Mobile Platform, 3. Web browser

*Out of the box Push support for Fiori and Fiori Client is a roadmap feature. SAP roadmap disclaimer applies. **SAP Fiori, cloud edition premium is a planned feature and subject to change, the SAP roadmap disclaimer applies.
HTML5 app development
- SAP WebIDE context

**SAP Web IDE**
- Tool to develop Web and Hybrid apps
- Build new apps
- Modify Fiori apps

![Diagram of HTML5 Development, Applications, and Distribution](image-url)

- **SAP UI5**
  - JS UI Framework
- **SAP Fiori UX**
  - UI design paradigm
- **SAP WebIDE**
  - App development tooling
- **3rd party HTML5 tooling**
- **Mobile SDK hybrid**
- **HCPms**
- **SMP on-premise**
- **Applications**
  - on-premise Web
  - HCP Web
- **Distribution**
  - Mobile Secure
  - App distribution, management and enhanced security

**HTML5 Development**

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HCP technologies and their mobile use case

Create web apps
- SAP WebIDE
- SAP Build

Run web apps
- Hana Cloud Platform
- SAP Cloud Portal
- SAP Fiori launchpad
- SAP Fiori cloud edition

This is a high level overview that serves as an illustration and not a comprehensive list of all possible technology options.
HCP technologies and their mobile use case

Create hybrid apps
- Hybrid SDK / Kapsel
- SAP Build
- SAP WebIDE

Develop native apps
- Native mobile SDK

Distribute, manage and build
- HCP mobile secure
- Fiori cloud, premium edition

This is a high level overview that serves as an illustration and not a comprehensive list of all possible technology options
HCP technologies and their mobile use case

Serve web apps
- Hana Cloud Platform
- SAP Fiori launchpad
- SAP Fiori cloud edition
- SAP Cloud Portal

Serve Hybrid and Native
- HCP mobile services

Easy Fiori mobilization
- SAP Fiori cloud edition

This is a high level overview that serves as an illustration and not a comprehensive list of all possible technology options.
Going mobile with Hana Cloud Platform

- Build mobile apps for many use case
- Open development paradigms
- Build, integrate and extend
Thank you

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