

AIR Overview

Daniel Dura

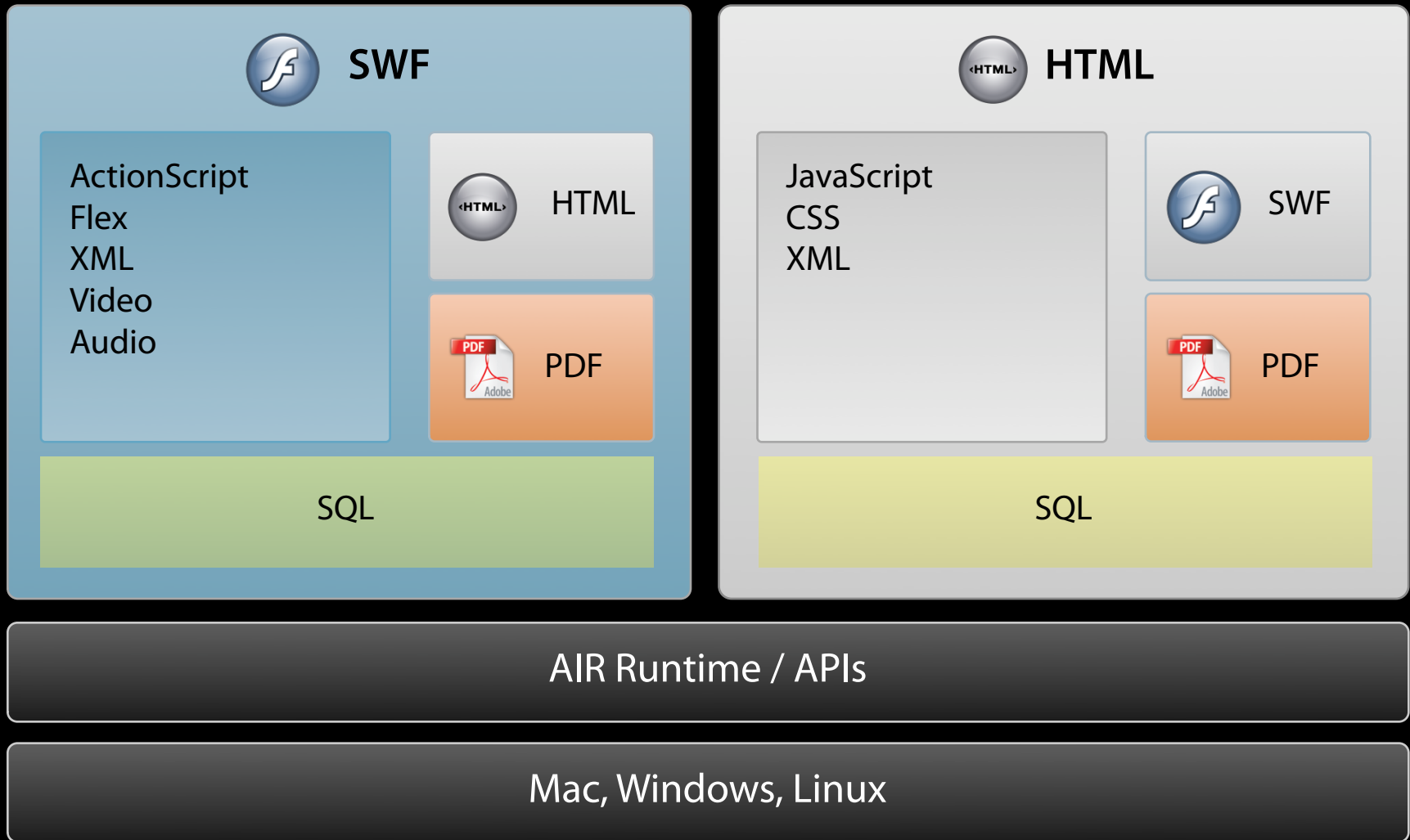
Platform Evangelist

Adobe Systems, Inc.



Adobe Integrated Runtime (AIR) is a cross-operating system runtime that allows developers to leverage their existing web development skills to deploy desktop RIA's.

AIR Application Stack

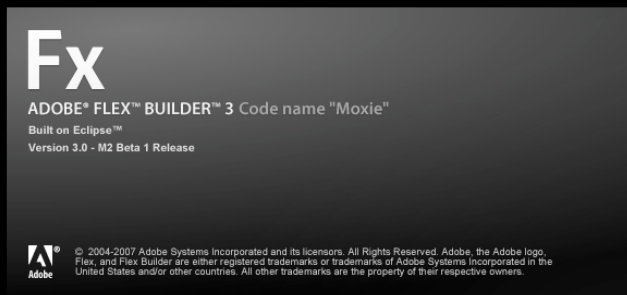
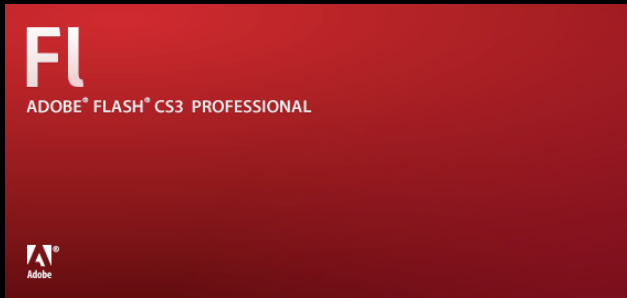


AIR 1.0 Functionality/APIs

- Network Detection
- File I/O
- Custom Window Chrome (shapes, alpha transparency)
- Multi-Window
- Native Menus
- Drag'n'Drop, Clipboard Access
- System Tray and Dock Notifications
- Application/Installer Signing
- Application Icons
- File Type Registrations
- Background Applications
- Application Update APIs
- Network
 - Updated HTTP Support
 - Supports XML-RPC / SOAP / Rest Based Web Services
 - Binary and XML Sockets



Tooling



- Flex
 - Flex Builder
 - Flex SDK Support
 - Available on Adobe Labs
- Flash CS3 Extension
 - Available on Adobe Labs
- Dreamweaver CS3 Extension
 - Available on Adobe Labs



Flex AIR Support

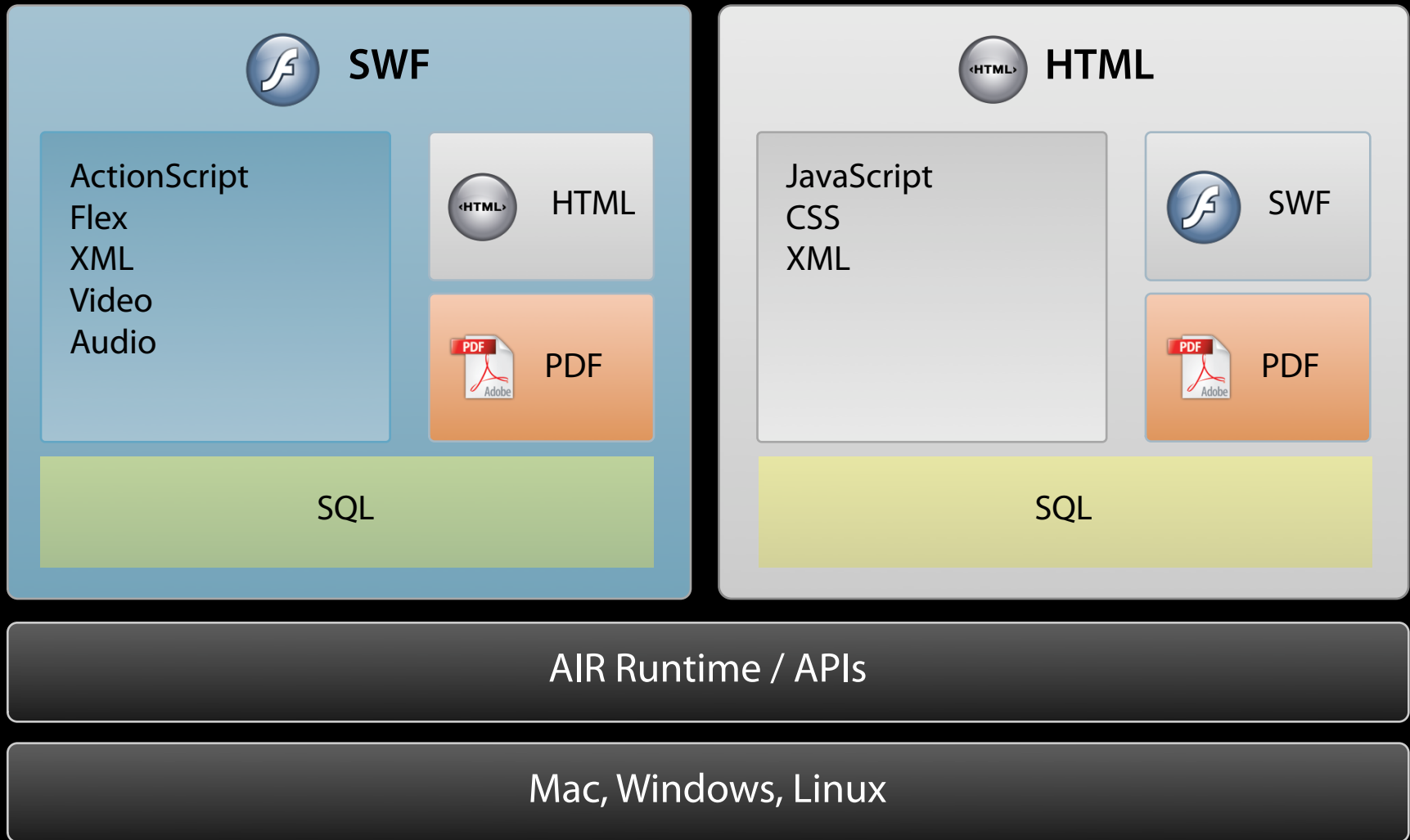
- Flex Builder 3
 - Debugging
 - Code Hinting
 - Packaging / Signing
- Native File Dialogues
 - Multi-Window `<mx:Window />`
 - HTML `<mx:HTML />`
 - Drag and Drop
 - File Choosers
 - more...

The Flex logo, consisting of the letters 'F' and 'X' in a bold, white, sans-serif font, is centered on a dark gray rectangular background. The 'F' is on the left and the 'X' is on the right, with a small gap between them. The background has a subtle gradient from top to bottom.



`<HelloWorld />`

AIR Application Stack



AIR Scripting and Rendering Support



- ActionScript 3 - Flash / Flex / MXML
- JavaScript
- HTML / CSS / XML / Ajax
- PDF

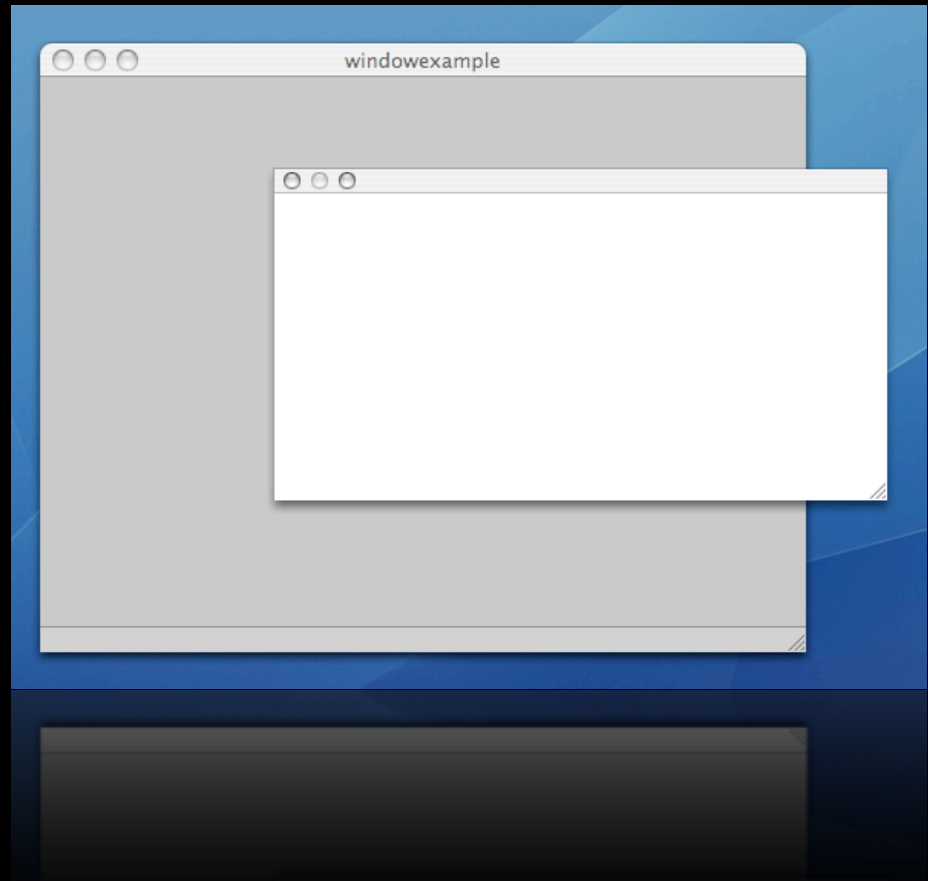
- Flash Player / AVM2 (Tamarin)
- WebKit / JavaScript Core



Window API

- Multi Window Support
- Transparent Windows
- Window Types
 - Lightweight
 - Utility
 - Standard
- Z-Ordering
- Always in Front

- Example: Pixel Perfect, Screenplay



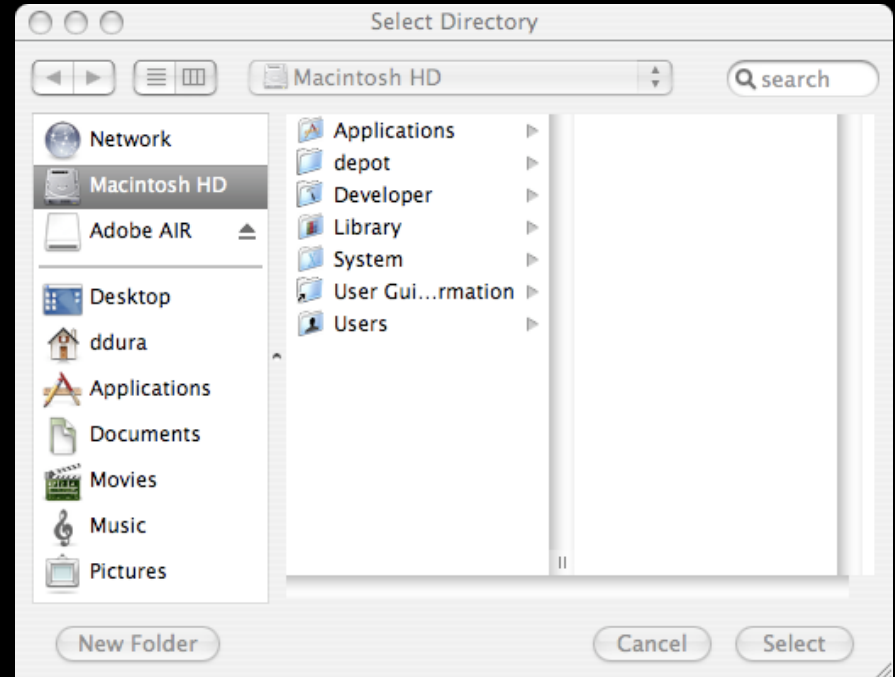
HTML Control

- Integrated into Flash Rendering Pipeline
- Script Bridging
- Ability to Override Default Behaviour
 - Navigation
 - History Management
 - Window Management
 - Resizing
 - ... more ...



File I/O

- Full Read/Write Access
- Native File Dialogues
 - Save
 - Select
 - Select Multiple
 - Directory
- Async and Sync APIs



Database Support

- SQLite Embedded Database
- Zero Setup, Single File
- Supports SQL92



Drag and Drop / Clipboard

- System Level Drag and Drop
 - AIR Application to AIR Application
 - AIR Application to OS Application
 - OS Application to AIR Application
 - Desktop to AIR Application
- Multiple Formats
 - URL
 - Files
 - Text
 - Serialized AS Objects
- Modifiers (Link, Copy, Move)
- **Example: Salsa**



Application Icons

- No knowledge of icon formats required
- Accepts PNG image format



Service Monitoring (Online/Offline)

- Monitor Network Interface Changes
- Monitor Services
- Extensible - supports multiple service types.



A dark, high-angle aerial photograph of the Earth's surface, showing a curved horizon and a mix of dark and light brown terrain. The image is dimly lit, with the text and logo appearing in white and red.

AIR

More...

Adobe Labs: AIR

<http://www.adobe.com/go/air>

onAIR Bus Tour - Summer '07

<http://onair.adobe.com>

Daniel Dura's Weblog

<http://www.danieldura.com>

MXNA: AIR Smart Category

<http://weblogs.macromedia.com/mxna>