

Adobe AIR

Overview:

AIR (also known as Adobe Integrated Runtime and formerly Adobe AIR) is a cross-platform runtime system developed by Adobe Systems for building desktop applications and mobile applications. Programmers using HTML, JavaScript, Adobe Flash, Flex technologies and Action Script to deploy rich Internet applications (RIAs) on a broad range of devices including desktop computers, netbooks, tablets, smartphones and TVs.

Adobe AIR Tools:

AIR allows developers to use familiar tools such as Adobe Dreamweaver, Flash Builder, Flash Catalyst, Flash Professional or any text editor to build their applications and easily deliver a single application installer that works across operating systems.

Adobe AIR supported operating systems:

Adobe AIR runs on Windows, Mac OS, Android, iOS and BlackBerry Tablet OS etc..

Where can I get the Adobe AIR runtime?

- Desktop computers: Download from the Adobe AIR Download Centre.
- Android devices: Download from Google Play directly from your device.
- BlackBerry: The runtime is preinstalled and integrated into the BlackBerry Tablet OS.
- IOS devices: AIR apps for iOS install a "captive" version of Adobe AIR; therefore, users do not install a dedicated version of AIR.
- Television: The runtime is preinstalled on supported televisions.

Cost:

The Adobe AIR runtime and AIR SDK are free for most users.

Desktop features:

On desktop platforms, AIR supports:

- **Window management** – Opening multiple windows, minimizing, maximizing and resizing AIR windows
- **Menu bar** – Adding a native menu bar to AIR windows, with sub menus and custom menu items.
- **File management** – Discovering drives, files and folders on the PC, creating and deleting files, renaming, copying and moving files.
- **Console applications** – Executing native applications with command-line arguments, and receiving feedback via standard I/O & error streams.
- **Multithreading** – Managing multiple threads, to execute Action Script code in the background without freezing the user interface.
- **Web browser** – View HTML web pages with full CSS and JavaScript support within applications, with the integrated WebKit-based web browser.
- **Clipboard access** – Programmatically copy or paste text, bitmaps or files into the system clipboard.
- **Drag-and-drop** – Allows users to drag text, bitmaps or files into AIR applications.

Mobile features :

On mobile platforms, AIR supports many mobile hardware features:

- **3D hardware-accelerated** graphics rendering (using Stage3D)
- **Touch-screen** events (including multi-touch gestures)
- Device camera and microphone access (including video encoding for recorded video)
- Accelerometer and geo-location sensor input (GPS or otherwise)
- **Networking** with HTTP, TCP and UDP protocols
- **AIR Gamepad** - allows mobile applications to serve as secondary displays and controllers for games.

Adobe Security:

Security is a key concern of Adobe, users, system administrators, and application developers. For this reason, Adobe AIR includes a set of security rules and controls to safeguard the user and application developer.

Microsoft Online:

Microsoft Online follows hybrid model for customers and vendors benefits.

Hybrid Model:

Microsoft is moving toward a hybrid strategy of Software plus Services, a combination of on-premise software, partner-hosted software, and Microsoft-hosted software.

Microsoft Online software plus services:

Microsoft **Online** offers Exchange Online , SharePoint Services ,Dynamics CRM, Microsoft Outlook, .NET Services, SQL Services and Active Directory etc..

Microsoft Exchange Online:

Microsoft Exchange Online is a hosted messaging solution that delivers the capabilities of Microsoft Exchange Server as a cloud-based service. It gives users access to email, calendar, contacts, and tasks from PCs, the web, and mobile devices. It integrates fully with Active Directory, enabling administrators to use group policies, as well as other administration tools, to manage Exchange Online features across their environment.

System requirements for Exchange Online

For system requirements, the monthly subscription-based service available for business, education, and government organizations.

Features:

- Advanced security capabilities
- Easy to maintain
- Access from anywhere
- Outlook integration
- Data safeguards
- IT-level phone support
- Microsoft FastTrack for Microsoft 365

SharePoint Services

Organizations use Microsoft SharePoint to create websites. You can use it as a secure place to store, organize, share, and access information from any device. All you need is a web browser, such as Microsoft Edge, Internet Explorer, Chrome, or Firefox.

Dynamics CRM

CRM stands for customer relationship management. It's a category of integrated, data-driven software solutions that improve how you interact and do business with your customers. CRM systems help you manage and maintain customer relationships, track sales leads, marketing, and pipeline, and deliver actionable data.

Microsoft Outlook

Microsoft Outlook is an application that is used mainly to send and receive emails. It can also be used to manage various types of personal data including calendar appointments and similar entries, tasks, contacts, and notes.

.NET Services

The .Net framework is a software development platform developed by Microsoft. The framework was meant to create applications, which would run on the Windows Platform.

SQL Services

The SQL Services is a database software application developed by Microsoft for storing, retrieving large amount of data.

Active Directory

Active Directory, introduced with Windows Server 2000, is included with most versions of Windows Server, but is also available as a service. Its primary function is to facilitate authentication and authorization of users (members) and resources within an AD domain. It is used to provision, store, and manage users, groups, passwords, and contacts, among other objects.

Main Features :

- Centralized **resources** and **security** administration.
- Single logon for access to global **resources**.
- Simplified resource location.

Mobile Device Integration

A key component of Software plus Services is the ability to work in the cloud from a mobile device.

Mobile cloud computing is defined as an integration of cloud computing technology and mobile devices in order to make mobile devices resourceful in terms of computational power, memory, storage, energy, and context awareness.

Google Android is the best operating system used in mobile devices. it was developed by Google.

Google Android:

Android is a mobile operating system based on a modified version of the Linux kernel and other open source software, designed primarily for touchscreen mobile devices such as smartphones and tablets.

Android is developed by a consortium of developers known as the Open Handset Alliance and commercially sponsored by Google.

The first commercial Android device launched in September 2008.

It is free and open source software;

Software packages on Android, which use the APK format, are generally distributed through proprietary application stores like Google Play Store.

Android has been the best-selling OS worldwide on smartphones.

Features in Android:

- Beautiful USER INTERFACE
- Connectivity : Bluetooth, Wi-Fi, NFC and WiMAX etc..
- Storage : SQLite, a lightweight relational database, is used for data storage purposes.
- Media support : JPEG, PNG, GIF, and BMP. Etc ..
- Messaging ; SMS & MMS
- Web browser : Chrome ..etc

- Multi-Language
- Multi-tasking
- Resizable widgets
- Multi-touch