

글로벌 비지니스를 위한 차세대 플랫폼 전략

SAP HANA Cloud Platform

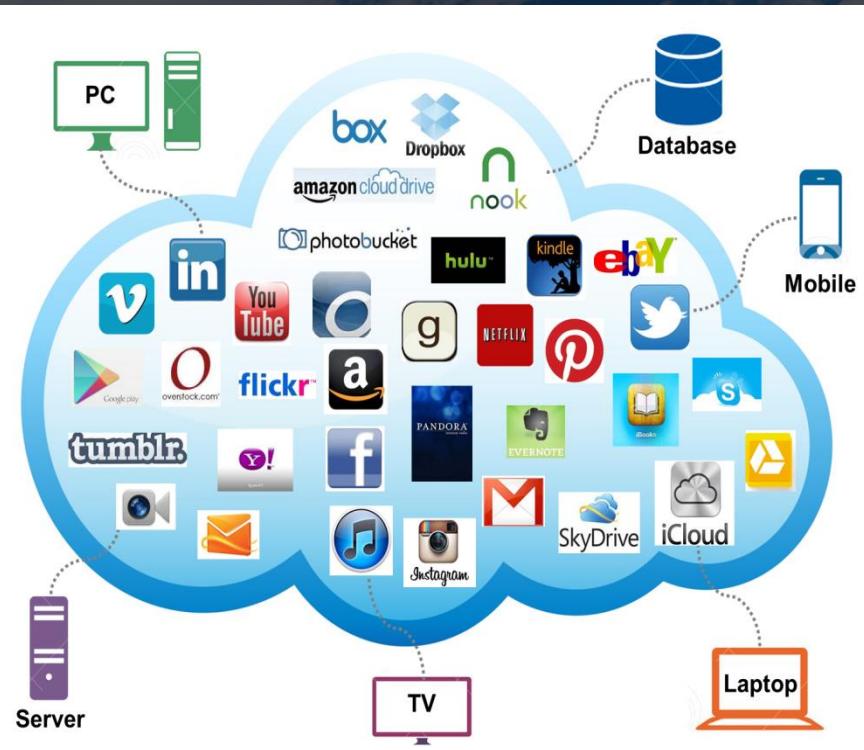
2015. 9. 2

조용완 이사 / SAP Korea

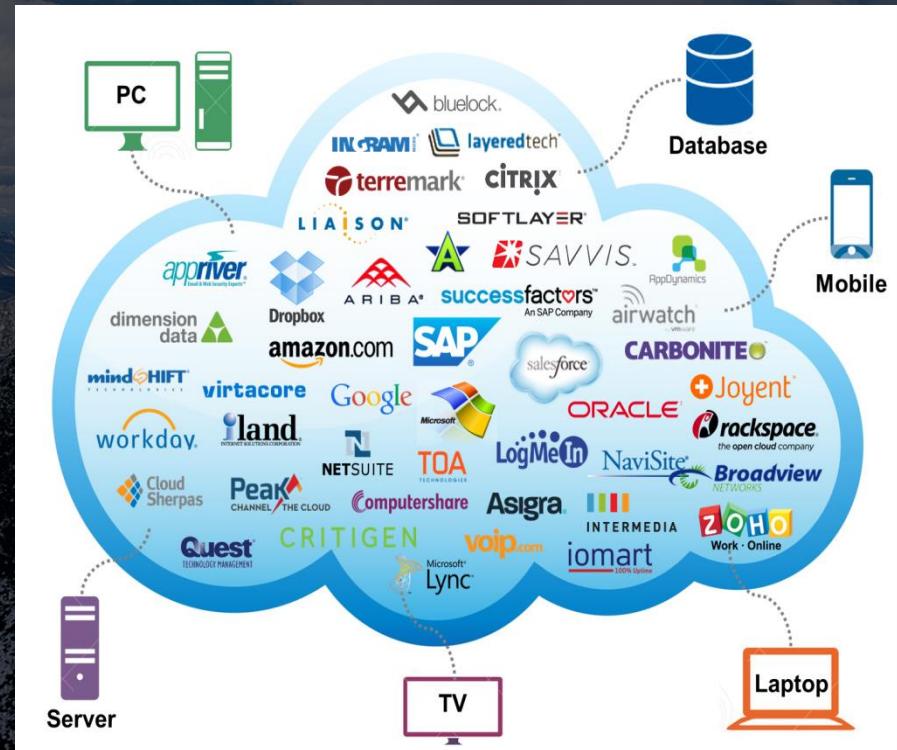


비즈니스 어플리케이션의 환경 변화

소비자용 클라우드 어플리케이션

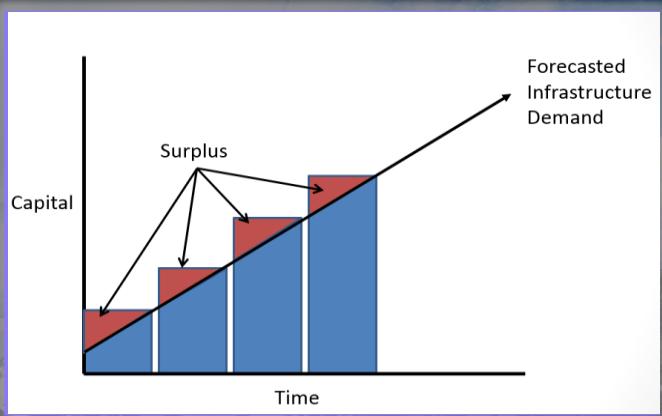


기업용 비즈니스 클라우드 어플리케이션



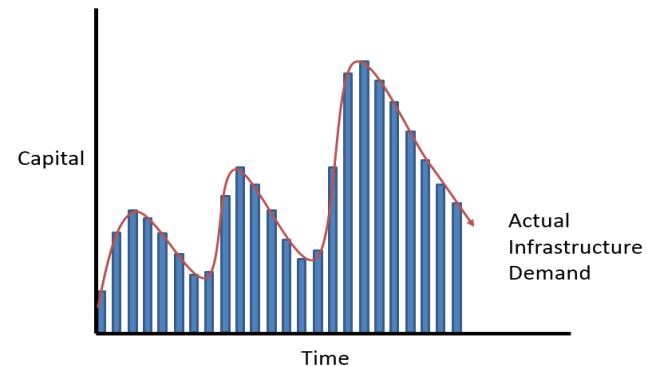
인프라스트럭처 환경의 변화

전통적인 방식의 인프라스트럭처



신속하고 유연한 IT Resource 사용을 지원함으로써 IT에 대한 비용, 시간, 운영 자원의 최적화가 가능해짐

유트리티 인프라스트럭처 모델



The Next Frontier : On Demand Solutions for Your Business

Cloud

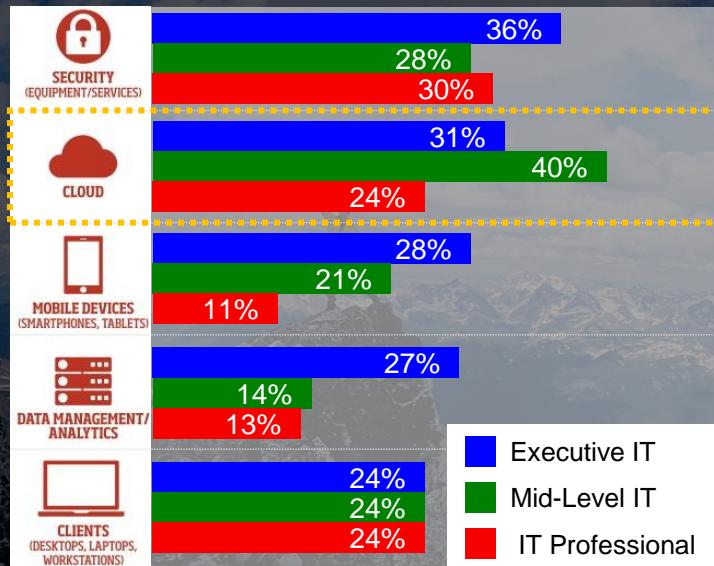
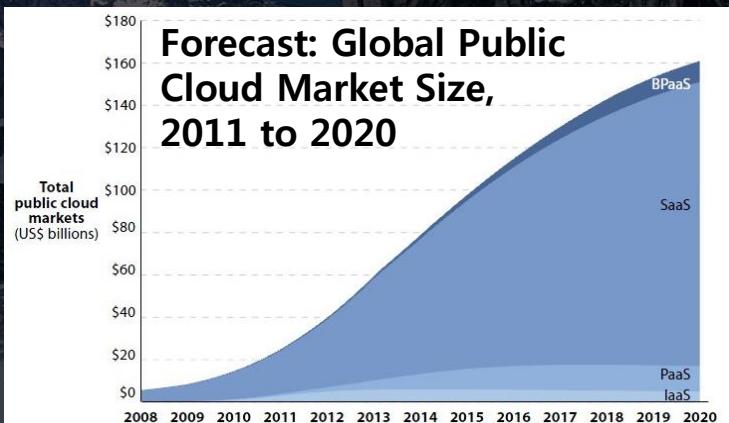
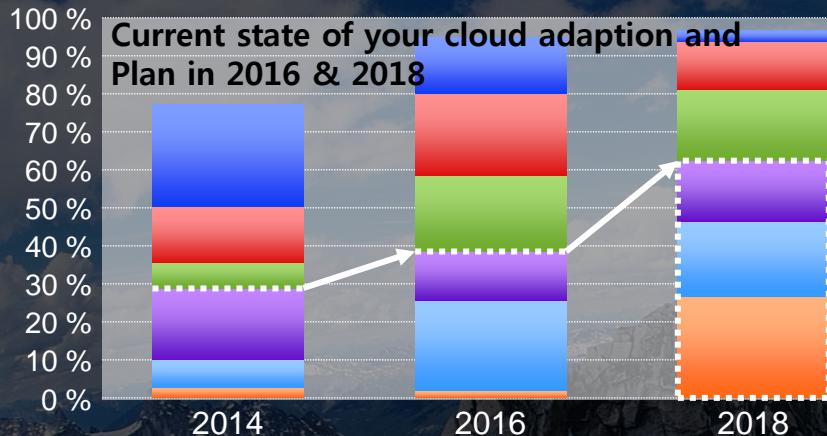
Web

Client-Server Computing

Personal Computers

Mainframe

클라우드 시장 동향



What are the **top 3 IT initiatives** your organization plans to focus on over the next 12 months ?

Source: Cloud Business Summit 2014

CLOUD (SaaS)



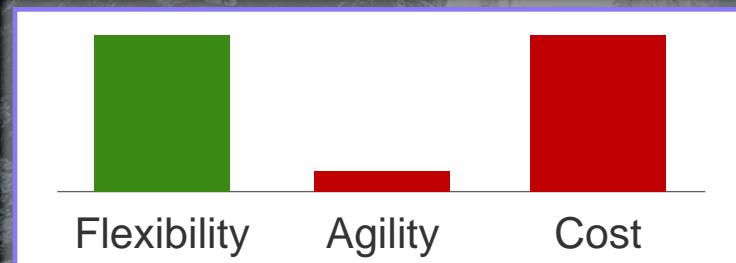
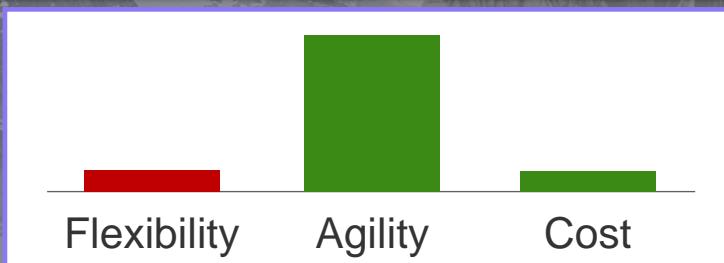
SaaS가 좋은 건 알겠는데....

Vs.

On-Premise



우리 회사만의 요구사항은 ...



PaaS를 통한 커스터마이징 및 확장성 확보

Cloud Application



Cloud Platform



Enterprise급
SaaS 어플리케이션의
표준 프로세스 활용

고객사 특화 프로세스
확장 및 신규 개발을 위한
클라우드 플랫폼

PaaS를 통한 커스터마이징 및 확장성 확보

Cloud Application



Cloud Platform



SaaS의 표준 기능과 PaaS의 플랫폼
기능을 활용하여 클라우드 어플리케이션의
확장성 및 유연성 보장

PaaS를 통한 SaaS 2.0으로의 발전

기존 SaaS 방식의 기능확대 및 고객의 Unique한 요구사항을 지원하기 위해 SaaS와 PaaS를 혼합한 형태의 Offering이 필요하며, PaaS 제공여부가 Cloud의 주요 경쟁력임

SaaS Only

- User Experience
- Application Services
- Platform Services
- Infrastructure Services
- Operation Services
- Security Services

Data Center

SaaS + PaaS

- Customer Experience
- Application Services
- Platform Services
- Infrastructure Services
- Operation Services
- Security Services

Data Center

Vs.

“좋아 보이지만, 핵심이 빠진”

“어플리케이션 + 확장 플랫폼”

SAP SaaS Applications

People



Customer



Money



Supplier



SAP PaaS Platform

HANA Application Service

HANA Database Service



HANA Cloud Platform



SAP/Non-SAP
On-Premise

SAP HANA Cloud Integration

Real-Time
Process
Integration

Data
Integration

Prepackaged
Integration
flows

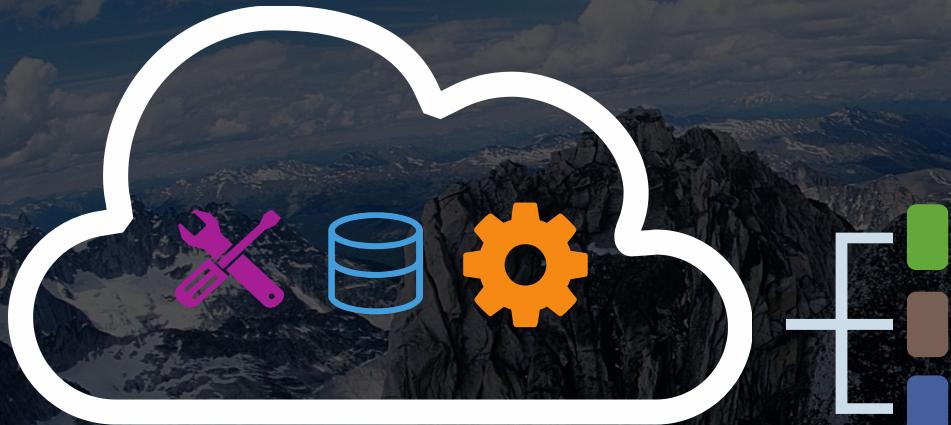
Community
and
Marketplace



3rd Party
Cloud

What is SAP HANA Cloud Platform ?

SAP HANA Platform 기반의 클라우드 환경에서 차세대 어플리케이션의 개발, 확장, 실행, 운영을 가능하게 하는 SAP 차세대 전략 플랫폼



SAP에서 제공하는
In-Memory 기반의 **Cloud**
Platform-as-a-Service
("PaaS") 서비스

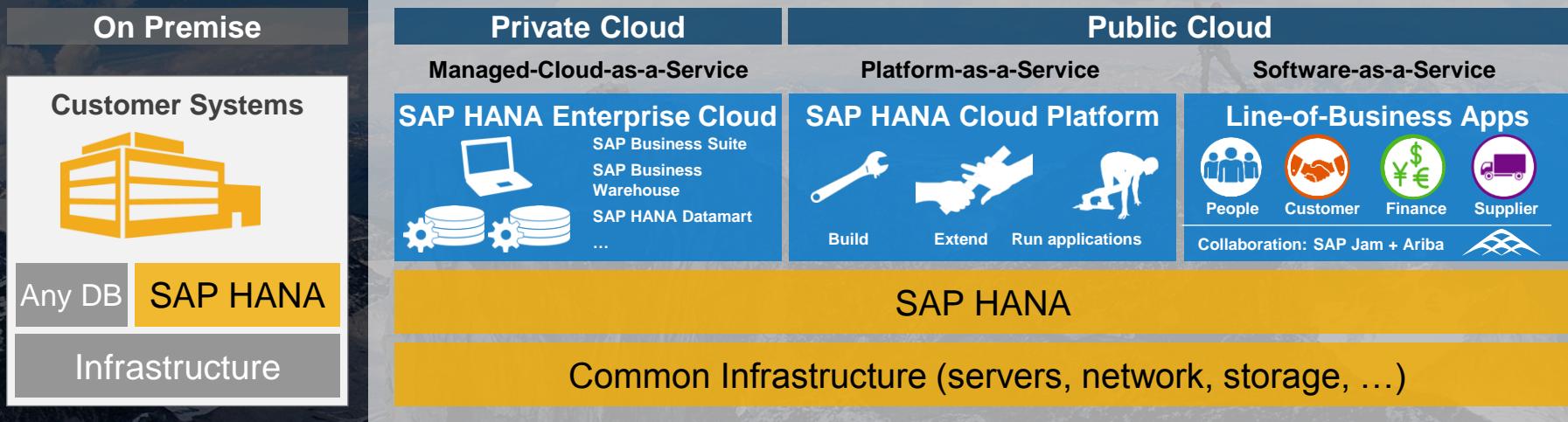
hcp.sap.com

SAP Cloud Powered by SAP HANA

HANA Platform Product Portfolio Overview

SAP Cloud

Integration leads to new & innovative business processes



Core Applications

Next-Generation Applications

SAP Cloud Powered by SAP HANA

HANA Platform Product Portfolio Overview

SAP Cloud

Integration leads to new & innovative business processes

On Premise

Customer Systems



Any DB SAP HANA

Infrastructure

Private Cloud

Managed-Cloud-as-a-Service

SAP HANA Enterprise Cloud



SAP Business Suite
SAP Business Warehouse
SAP HANA Data Mart
...

Public Cloud

Platform-as-a-Service

SAP HANA Cloud Platform



Software-as-a-Service

Line-of-Business Apps



SAP HANA

Common Infrastructure (servers, network, storage, ...)

Core Applications

Next-Generation Applications

SAP HANA Cloud Platform Key Components

Manage Cloud & On-Prem.

Business Suite

Business Warehouse

Other SAP Applications

Non-SAP

PaaS (SAP HANA Cloud Platform)

Runtimes / Programming Models



XSJS



HTML 5



docker



Application Services

UX

Identity Mgmt.

SSO

API Mgmt.

Portal

Analytics

Mobile

Collaboration

Cloud Connector

Integration

Gateway

Doc. Mgmt



Database Services

On Store

Planning

Spatial

Multi_DB

Other DBs,
Hadoop
Integration

Text

Predictive

Streaming

Tiering

HA / DR

Smart Data

Graph

Powered by SAP HANA

SaaS



Finance



HR



Procurement



Customer

SAP/Partners

SAP Cloud Center

IaaS (Infrastructure as a Services)

Standards-Based and Native HANA Development and Run-time Environment



HANA 및 JAVA
어플리케이션 개발



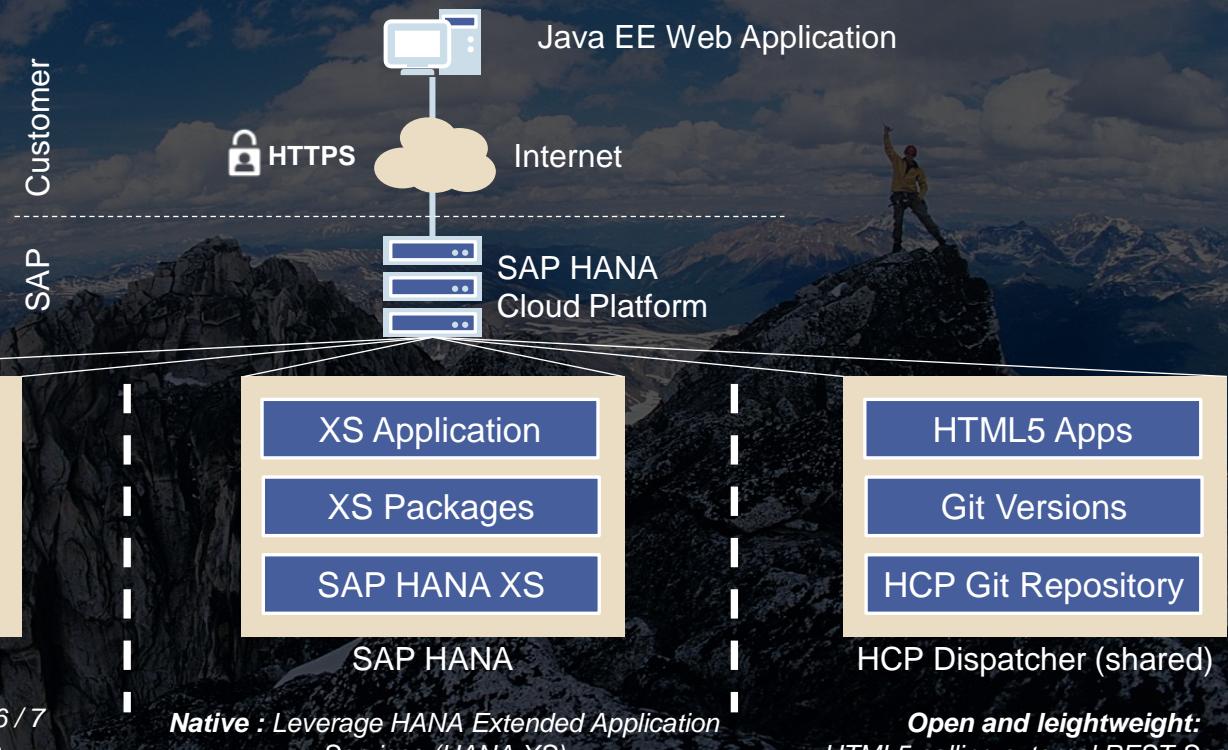
HTML5 어플리케이션
개발



표준 기반의 다양한 부가
서비스 컴포넌트

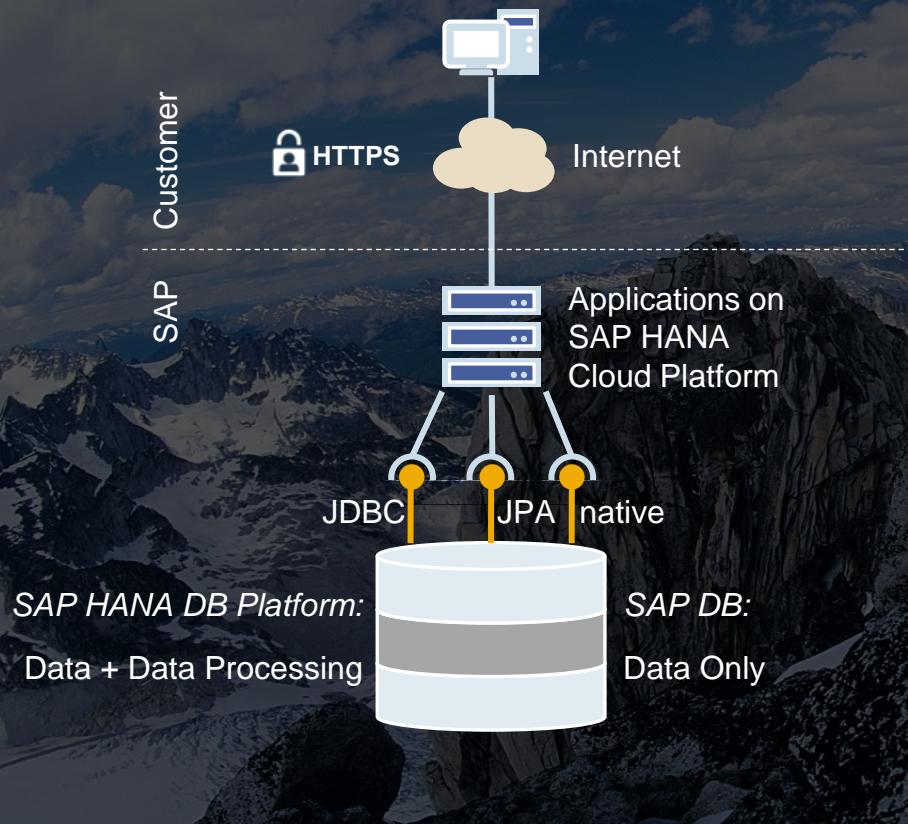
SAP HANA Cloud Platform Application Management

Implement and run control flows and front-ends in HANA and Java



Managed Data Persistence Service

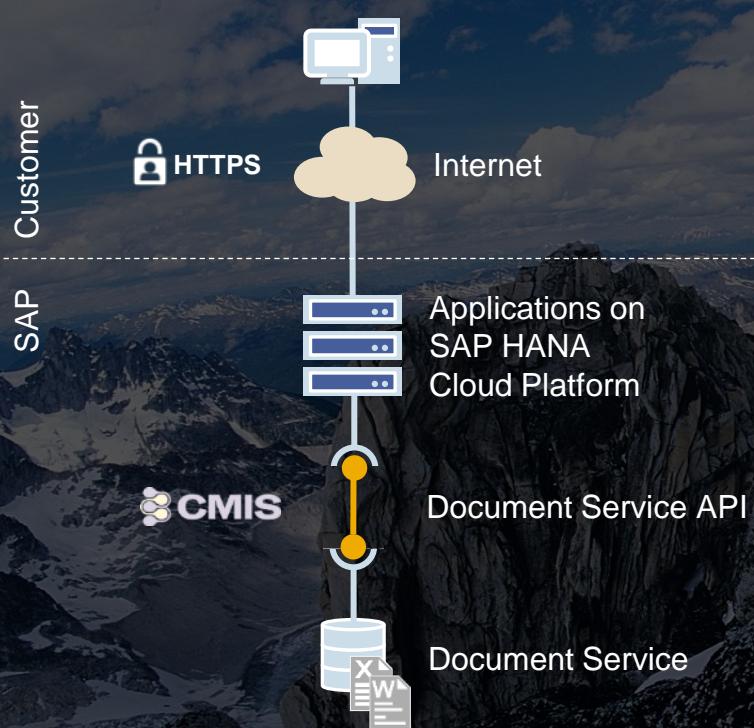
Database Access On-Demand Leveraging the Speed of HANA



- Push down heavy data processing operations to SAP HANA Database Platform
- Leverage SAP HANA Business Function Library or Predictive Analytics Library features such as graph store, streaming, planning, analytics, transactions, ... from HANA and Java
- Simple relational storage using SAP DB
- Support for Java and JVM-based languages: Object persistence using JPA 2.0 with EclipseLink and relational persistence with JDBC
- SAP HANA XS Support: Native integration of HANA DB platform and application platform

Managed Document Service

Highly Scalable Enterprise Content Management



CMIS : Content Management Interoperability Services



CMIS Standard Features

- Files & folders
- Metadata (types & properties)
- Queries via CMISQL
- Versioning
- Permission handling (ACL)
- Retention management

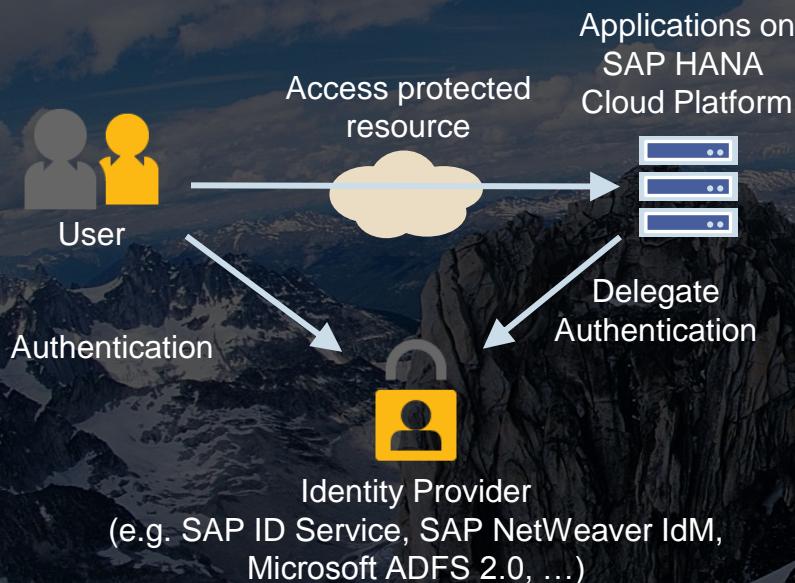


Additional Features

- AES encryption of content
- Virus scan on upload
- Multi-tenancy support
- Repository lifecycle
- Backups to multiple locations

Managed Identity Service

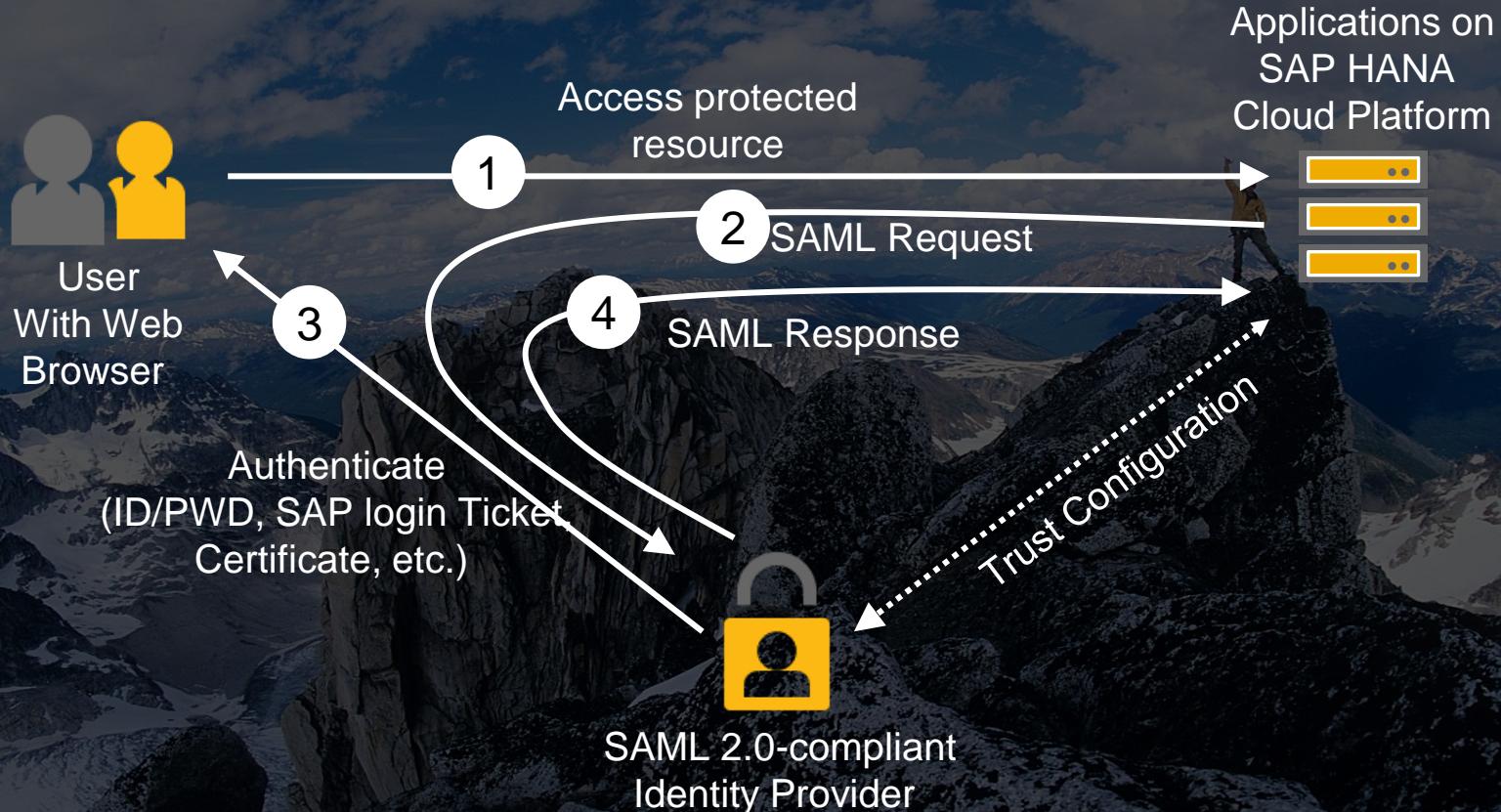
Delegated Authentication and Authorization Across SAP Applications



- SAML-based single sign-on (SSO) for delegated authentication and identity federation
- Support for 3rd party Identity Providers (IdP) in the cloud or on-premise
- Authentication against common 3rd party LDAP user directories, e.g. Microsoft Active Directory
- Flexible permissions model enables mapping from external group or roles memberships to web roles in the Cloud

Managed Identity Service

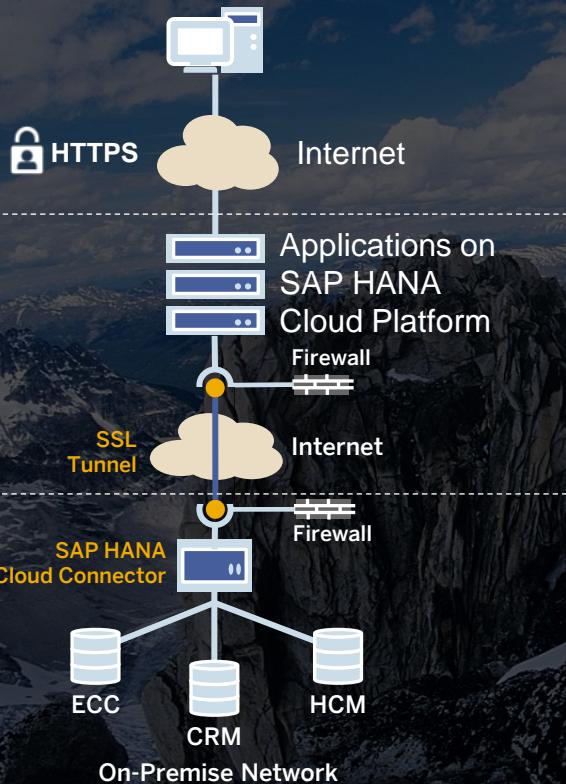
Delegated Authentication and Authorization Across SAP Applications



Managed Connectivity Service

Secure Integration with the SAP On-Premise Systems

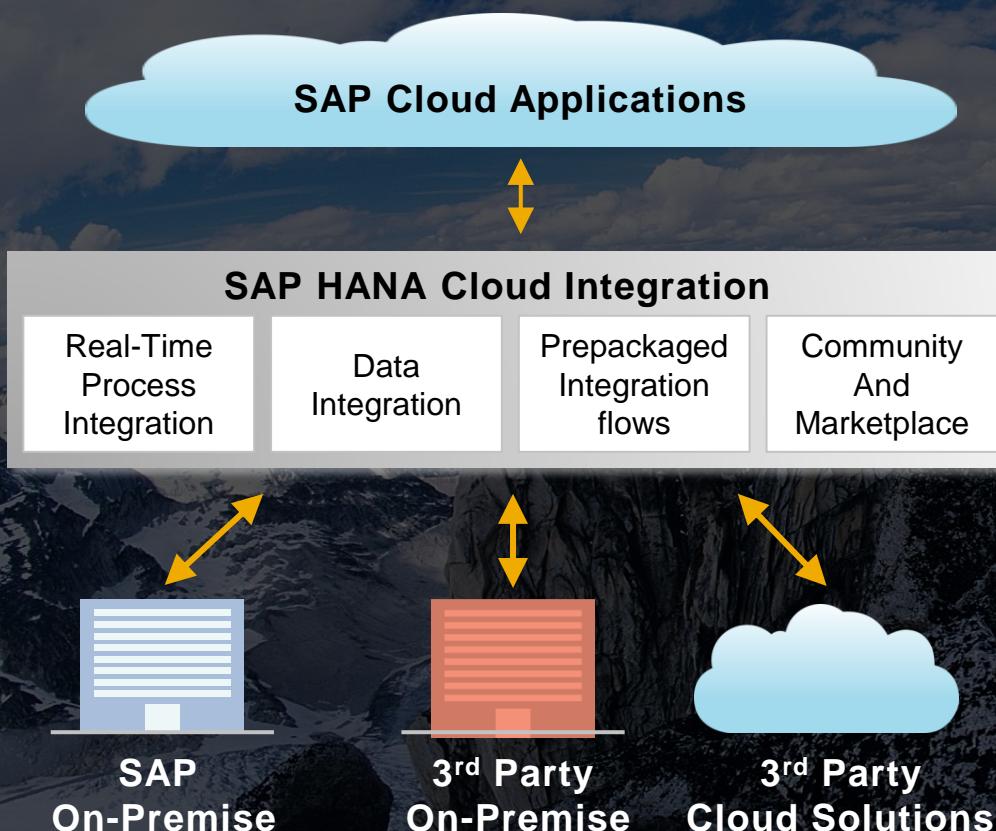
Customer



- Establishes secure SSL VPN connection between the SAP HANA Cloud and on-premise systems
- Connectivity created by on-premise agent through reverse-invoke process
- Supports pre-configured “Destination API” and certificate inspection to safeguard against forgeries
- Complementary to SAP Gateway, HANA Cloud Integration and 3rd party integration suites both on-premise and in the cloud

SAP HANA Cloud Integration

Integrate on-premise and cloud on SAP HANA Cloud Platform

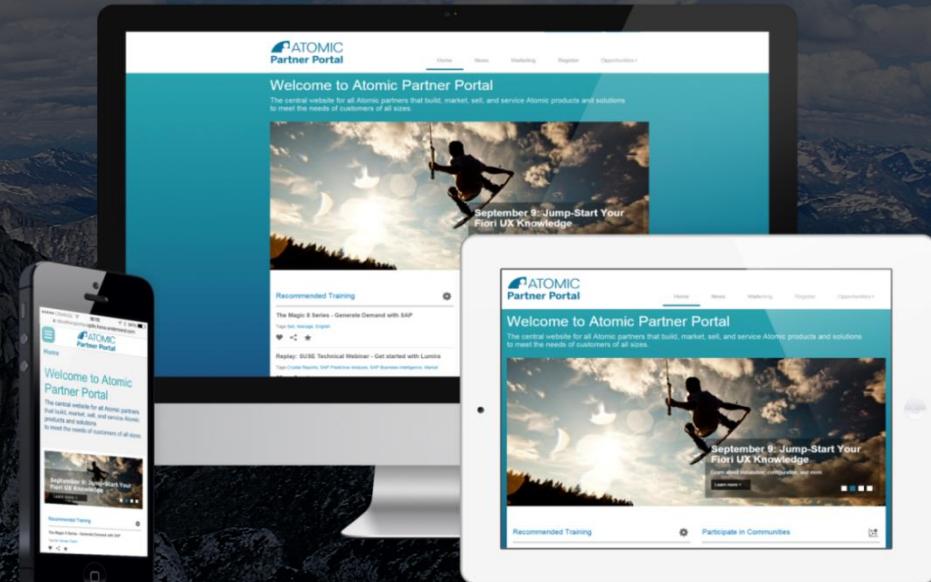


- Cloud-based technology
- Real-time, bi-directional process integration
- Data integration
- Graphical flows & mappings
- Centralized monitoring and administration
- Pre-built adapters
- Community marketplace (future)
- Compatible with SAP NetWeaver PI content (e.g. mappings) and SAP Data Services (planned)
- Lower cost of change over time

SAP HANA Cloud Portal

Easily create cloud-based portal for your customers, partners & employees

- **Cloud-based portal** solution
- **Easy site creation** and consumption
- **Mobile first** – designed for mobile consumption
- **Fast branding and customization**
- **Seamless integration** with on premise and cloud based systems (SAP and non-SAP)
- **Role-based** user authorization
- Supports open **standards**



SAP HANA Cloud Platform - Services

Today – variety of infrastructure, database and application services

Application Services

Security	Portal	Documents	Administration	Integration	Mobile *	Tools
Authentication	Sites & Fiori Launchpad	Storage	Account Mmgt	On-Premise – Cloud Connector	Mobile App Lifecycle	Eclipse Plug-In
Identity Federation	Theming & Branding	Access Control	Members Mmgt	Extract, Transform, Load	Device Notification	WebIDE
Password Storage	Role-based Authorization	Versioning	Quota Mmgt	Process Integration	Discovery	SDKs
Policies	Content Catalog for Widgets	Repository & Folder Mmgt	Application Mmgt	Destination Mmgt	Offline OData	Marketplace
Single Sign-On	App Integration	Meta Data	Monitoring		Settings Exchange	
Social Sign-On	Templates	Encryption	Authorizations		Usage Analysis	

Database Services - SAP HANA

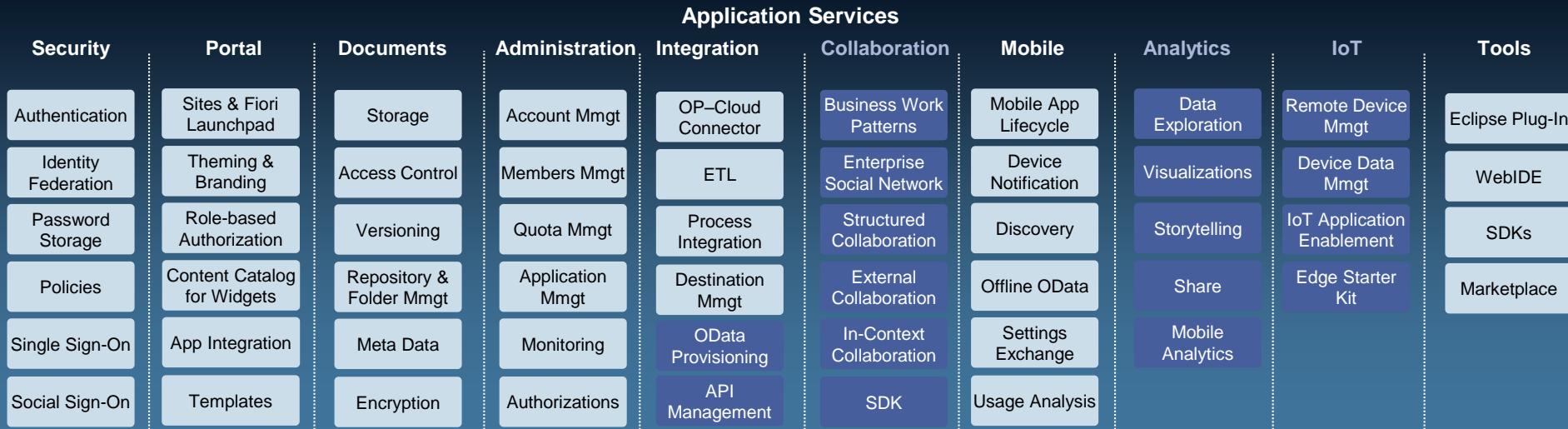
Core DB Services	Stored Procedures	Data Models	Function Libraries	Full Text Search	Text Analytics	Planning	Predictive	Spatial	Business Rules
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Infrastructure Services - at SAP Data Centers

Certified Operations | Advanced Network Security | SLA 99.9 % | Data Backup | Compliance | Integrity | Confidentiality

SAP HANA Cloud Platform - Services

Planned for 2015 – variety of infrastructure, database and application services



SAP HANA



Database Services

SAP ASE



Certified Operations | Advanced Network Security | SLA 99.9 % | Data Backup | Compliance | Integrity | Confidentiality



SAP HANA Cloud Platform Account

Each account holds:

- **Resources** that can be consumed by apps
- **Users** allowed to work in the account
- **Apps** deployed & running in the account
- **Data** written by apps running in the account
- **Configuration** for apps running in the account

Each account is assigned to a **datacenter**

Each account is **fully isolated**



SAP HANA Cloud Platform Landing page

All important links on one page:

- Cockpit
- Community
- Partner Center
- SAP Store

Register to get your free account !

<http://account.hanatrial.ondemand.com>

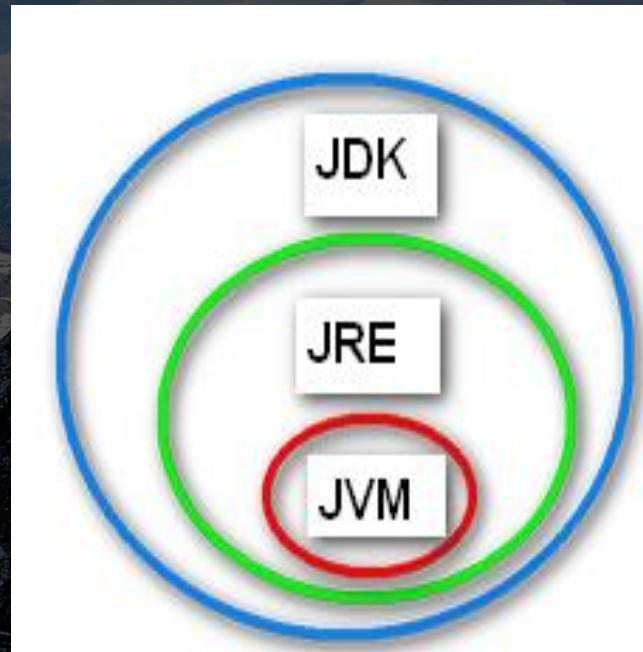
The screenshot shows the SAP HANA Cloud Platform landing page with a dark blue header and a light blue footer. The main content area has a white background with several sections:

- Log On:** A section for logging into the developer account with SAP ID or SCN credentials. It includes a "Log On" button.
- Not registered yet?**: A section for creating a free developer account or purchasing a customer account. It includes a "Register" button.
- Cockpit:** A section for managing accounts and applications, featuring a clock icon.
- Community:** A section for sharing experiences and finding news, featuring a network icon.
- Partner Center:** A section for building a successful Cloud business, featuring a person icon.
- SAP Store:** A section for getting and upgrading customer accounts, featuring a shopping cart icon.

The top right corner of the page shows navigation links: Cockpit, Help, Community, Tools, and Legal Disclosure.

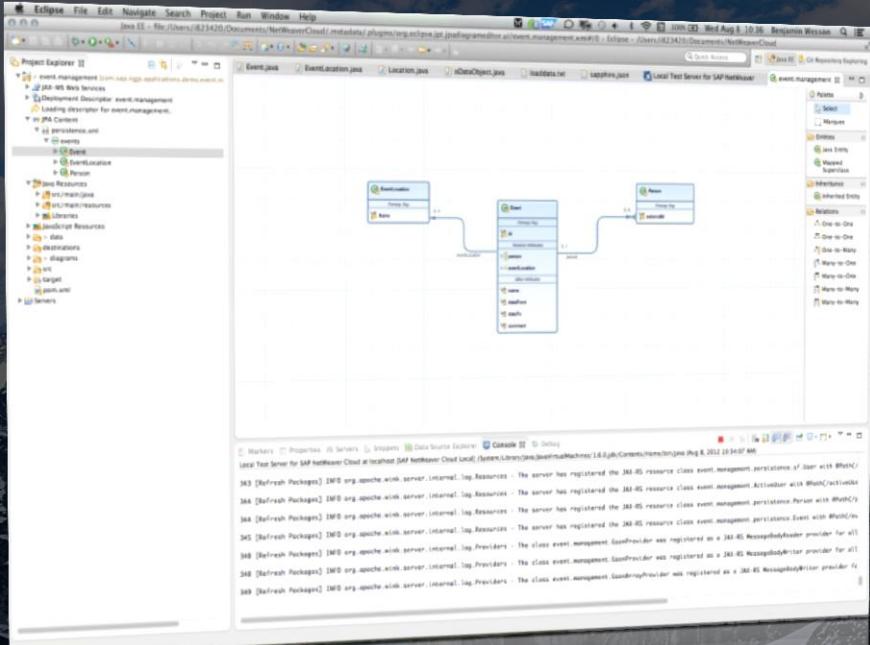
Setting Up the IDE - Necessary Steps

- Be sure you have **Java installed** on your machine!
- Download and install your **Eclipse IDE**
- Register for **your own account**
- Install **Eclipse Tools for SAP HANA Cloud Platform**
- Download **SAP HANA Cloud Platform SDK**
- Add **SAP HANA Cloud Platform server** for
 - local deployment
 - deployment on your account



Standards-based development environment

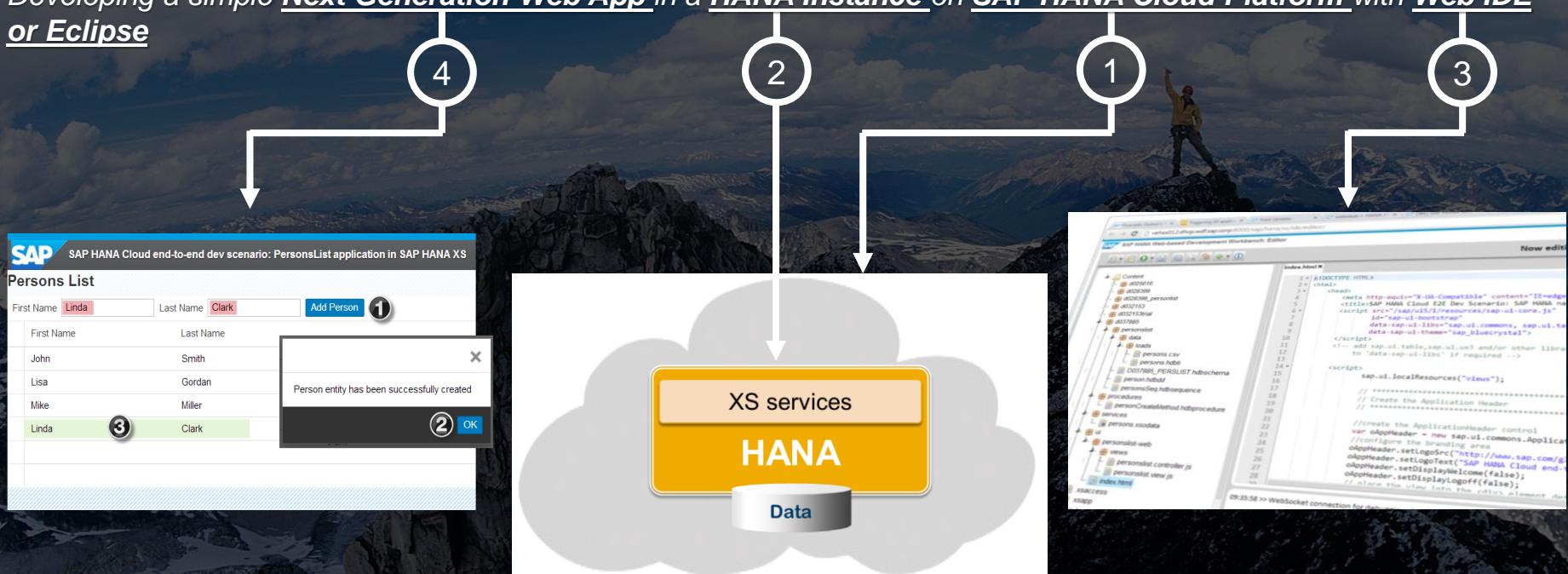
Develop HANA and Java applications



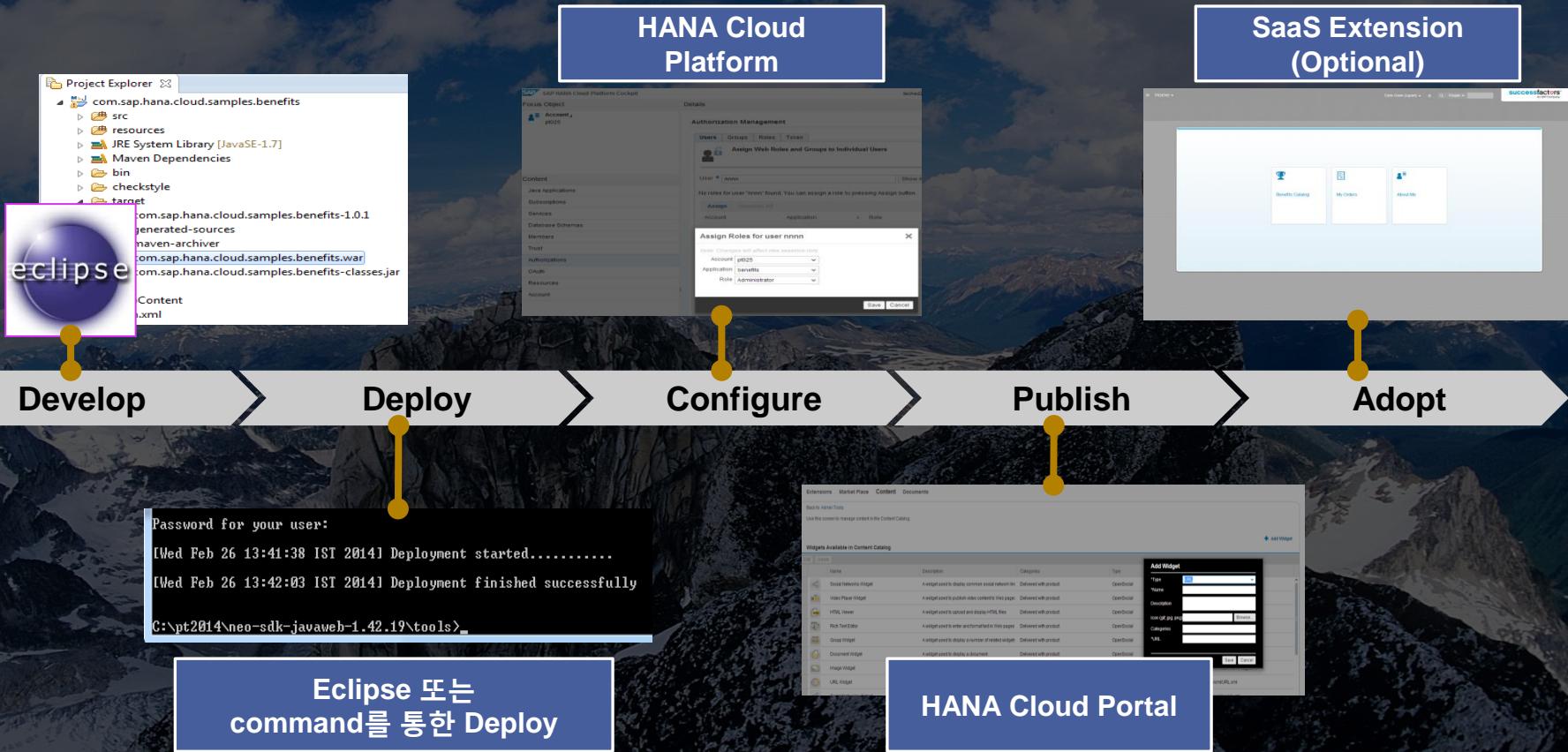
- Integrated Development Environment: SAP HANA Studio and SAP HANA Cloud Platform Tools for Java
- Command Line for scripting and continuous integration support: SAP HANA Client and SAP HANA Cloud Platform Console Client
- Leveraging open source projects from Eclipse and Apache
- Develop, debug, profile, test and manage applications on Java and HANA
- Integration in development infrastructure for code versioning, continuous integration

Start with Development on HANA Cloud Platform

Developing a simple Next Generation Web App in a HANA Instance on SAP HANA Cloud Platform with Web IDE or Eclipse



SAP HANA Cloud Platform Development Cycle



Open standards & open source

Communication

- <http://developers.sap.com/cloud>
- Release notes
- SCN Dev. Center
- Twitter, Slideshare...

Information & Help

- <http://hcp.sap.com>
- <https://help.hana.ondemand.com>

Education

- <https://open.sap.com>
- HANA Academy (YouTube)

Code samples

- github.com/SAP
- HCP SDK

Tools & SDKs

- <https://tools.hana.ondemand.com>
- Maven Central

SAP HANA Cloud Platform

USE CASES



Extend
On-Premise Apps



Extend
Cloud Apps



Build
New Cloud Apps

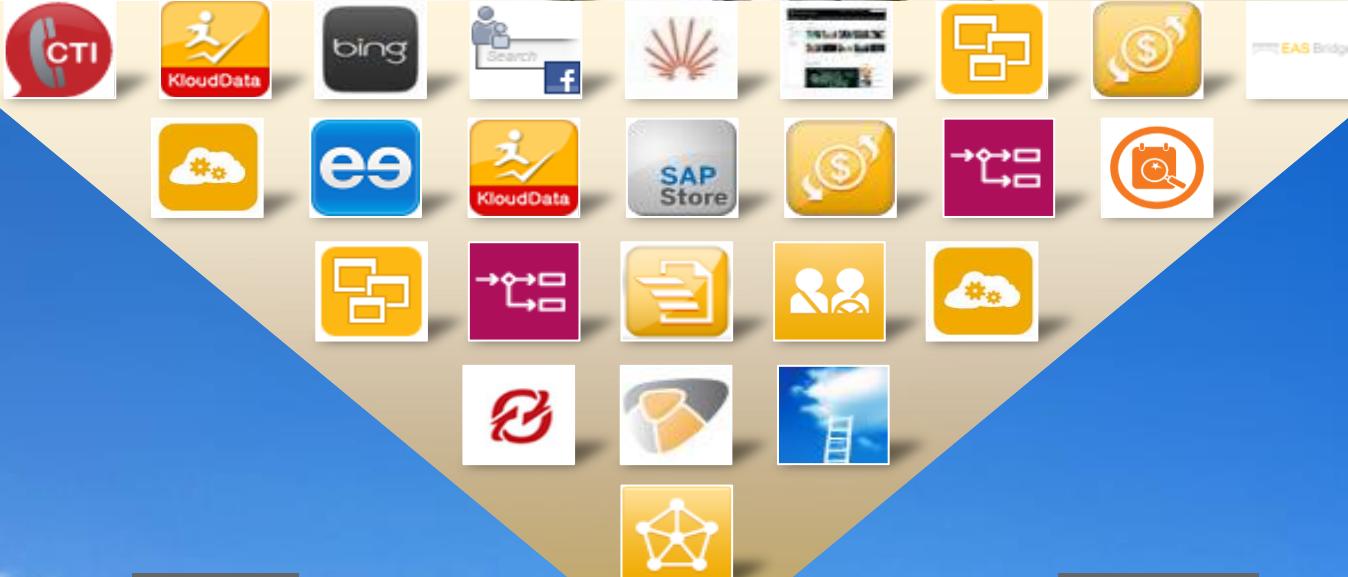
SAP HANA Cloud Platform – Key Customers



App Store



SAP Cloud Store



SAP HANA Cloud Platform – 2 takeaways

- 1 클라우드 플랫폼에 대한 투자 약속나 로드맵이 아닌 **지금 바로 사용 가능하고**, 많은 고객사와 파트너사에서 **이미 사용하고 있는 기업용 클라우드 플랫폼**
- 2 HCP는 클라우드 환경에서 **On-Premise의 확장, SaaS 어플리케이션의 확장, 새로운 차세대 어플리케이션 개발을 위한 최선의 선택**





The Cloud Company
Powered By HANA

Thank you!