

ICP - a new sovereign cloud from a public network

Tamperproof, always-on, runs AIware.

INTERNET COMPUTER PROTOCOL

AUGUST 2026

§ 01 WHO WE ARE

DFINITY Foundation



A Swiss not-for-profit advancing the technology of sovereign cloud and AIware.

DFINITY was founded in 2016 to build a new kind of cloud, one where security, integrity, and sovereignty are properties of the network itself rather than the operator. The Foundation is based in Zurich, operates under Swiss law, and is governed independently of any single state or corporation.

The organisation has invested more than \$500 million in research and development over nine years, building the Internet Computer, a frontier cloud created by a mathematically secure network protocol that combines independently operated compute nodes. Hosted apps and services are immune to infrastructure hacks and guaranteed to run. Security teams set policy and the network enforces it, so agents and developers can build and update at speed without becoming the new attack surface.

FOUNDED

2016

R&D INVESTED

\$500M+

OPERATING

5 years

HEADQUARTERS

Zurich,
Switzerland

JURISDICTION

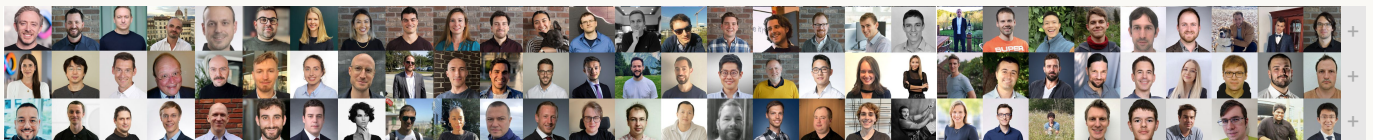
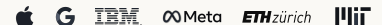
Swiss
not-for-profit

NETWORK LIVE

May 2021

THE TEAM · BUILT BY 250+ MEMBERS

TEAM BACKGROUNDS



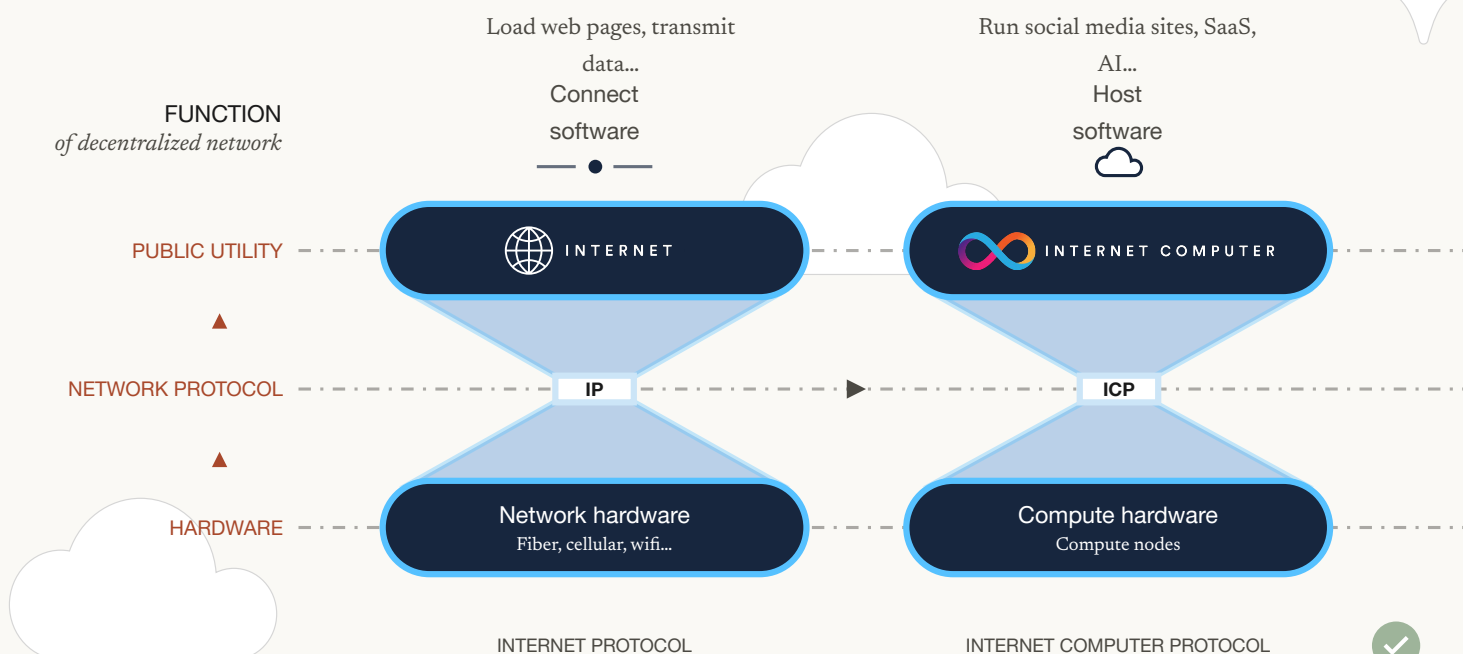
The world needs a *new kind of cloud*

Sovereignty, resilience under attack, and safety for AI. Traditional cloud fails on all three.

1. SOVEREIGN 	2. TAMPERPROOF & ALWAYS-ON 	3. AI-NATIVE 
Someone else owns your compute. Most of the world's cloud runs on a handful of US and Chinese hyperscalers. Each brings the legal reach of its home jurisdiction with it, wherever data physically sits. Critical infrastructure ends up under someone else's law, by default (e.g. US Cloud Act).	Cloud is under attack. Cyber and physical. AI has turned every attacker into an expert hacker. Recent conflicts have shown data centers themselves are targets. Traditional cloud assumes a trusted operator and a safe site. Neither assumption holds anymore.	Cloud isn't safe for agents. AI ships software faster than teams can review. Agents have deleted production databases in the wild. Another major limitation of current cloud is that agentic organization cannot run <i>AIware</i>. i.e software that is queryable by agents in realtime, which unlocks true agentic organizations.

The Internet Computer Protocol was built exactly for this environment

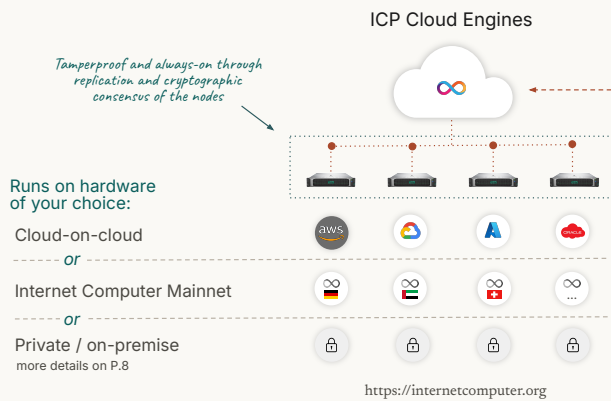
IP gave us the internet. ICP turns it into a cloud.



ICP is a new kind of cloud that is *sovereign, tamperproof, always-on* and it runs *Alware*

Run on nodes of your choice, including hyperscalers, and use AI to develop and operate apps

1 ICP Cloud engines run sovereign, tamperproof and always-on compute



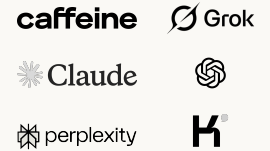
2 AI deploys and operates software on ICP Cloud Engines

AI builds software in a language made for agents

Build and deploy software with all major AI tools



The world's first language made for AI agents. It enables Alware and ensures agents can build without the risk of data loss



<https://docs.internetcomputer.org>

<https://skills.internetcomputer.org>

ICP provides *major benefits* over traditional cloud

Resolves today's cloud pressures in one move, and readies the enterprise for Alware and agentic intelligence

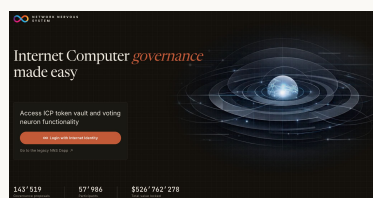
TRADITIONAL CLOUD	ICP CLOUD ENGINES
Your provider decides where your data lives	→ <i>You control</i> where every workload runs
Locked into one provider's prices and roadmap	→ Providers and jurisdictions can be <i>moved on demand</i>
A provider decision can suspend or cut you off	→ Cloud operators or software providers <i>cannot shut you off</i>
Large security teams reviewing every change	→ The <i>network enforces security</i> , no security team needed
A data center attack or outage stops your apps	→ When a data center fails, your cloud keeps running
Rented SaaS apps your business is forced to fit	→ Your <i>own Open SaaS</i> suite shaped for your business and agents
AI needs new tools like Databricks to reach your data	→ AI works on your apps and data directly, enabling <i>agentic intelligence</i>

The network is governed *by the network*, not by an operator

A protocol-level governance system decides what the network does. It is public, auditable, fast enough to be practical, and slow enough to be safe.

The Internet Computer is governed by a public system called the Network Nervous System (NNS). The NNS is itself a service running on the network, so its own rules and history are subject to the same integrity guarantees as any other software on the platform. The NNS has been governing the Internet Computer since 2021.

Every change to how the network behaves, including protocol upgrades, subnet membership, and node operator admission, is made as a public proposal, debated in the open, and voted on by a broad set of participants. A change only takes effect when the proposal passes.



<https://nns.internetcomputer.org>

What NNS decides

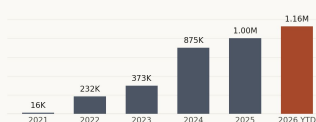
Protocol upgrades	New protocol versions rolled out to every subnet on a schedule the network can inspect.
Node admission	Which independently operated machines can join, and which subnet each one is assigned to.
Subnet topology	How services are grouped, and where their nodes are located geographically.
Economics	The public compute prices for the network, and the operator rewards that keep nodes running.

The network has shown remarkable growth since its genesis

Cumulative growth across canisters, identities, blocks, and nodes since network genesis in May 2021.

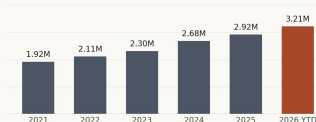
All figures cumulative, live from dashboard.internetcomputer.org.

CUMULATIVE CANISTERS



Every application on the Internet Computer runs inside one or more canisters, the network's unit of tamperproof, always-on software. Canisters grew from 16,000 at end-2021 to 1.16 million today.

INTERNET IDENTITY ACCOUNTS



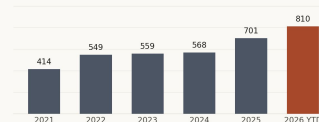
Internet Identity is the network's built-in authentication. 3.21 million accounts, using passkeys and hardware-backed cryptography rather than passwords. Standard sign-in for hundreds of applications.

CUMULATIVE BLOCKS PROCESSED



The network has run without interruption since May 2021, agreeing on 9.4 billion updates to its shared state across 50 independent groups of nodes. Every update is signed off by the group as a whole using threshold cryptography, so no single node - or attacker - can rewrite history.

INDEPENDENT NODE MACHINES IN SUBNETS

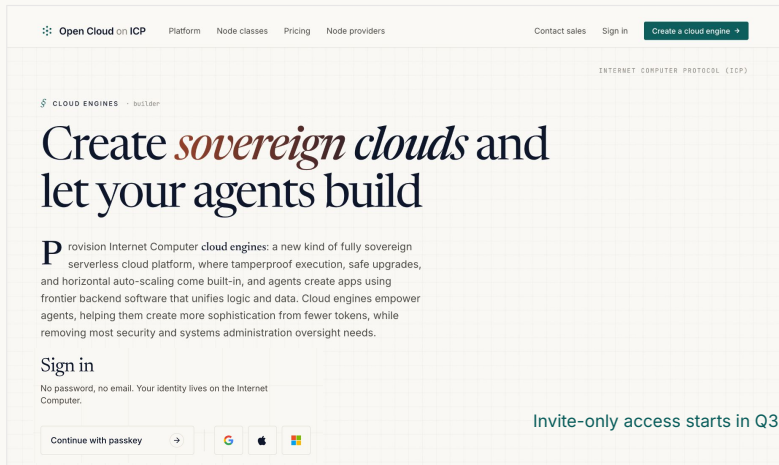


810 node machines contributed by 103 independent providers across 103 data centers. Each provider is a separate legal entity in a separate jurisdiction, so no single operator can pause the network.

With the upcoming launch of cloud engines, we estimate a further significant increase of apps being deployed on ICP. The global cloud market is USD 1 trillion, we assume that a part of this market will move to Internet Computer network

Soon the public will able to create their own Cloud Engine on *opencloud.org*

Provision a sovereign cloud and deploy apps in minutes



Three simple steps to create a Cloud Engine:

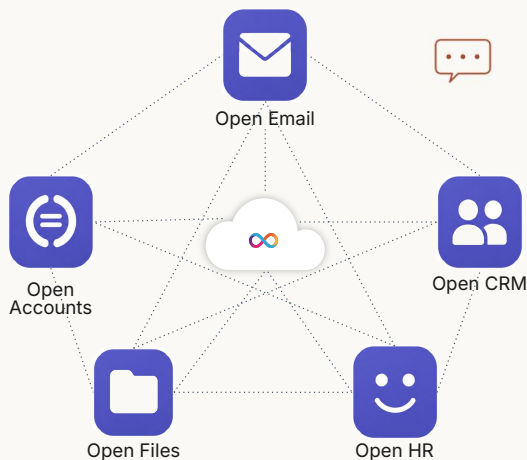
1. *Sign-in to opencloud.org* with Passkey, Google, Microsoft, Apple or your company SSO
2. Select the *nodes* that fit your security, regulatory and location requirements
3. *Deploy apps* like the included Open SaaS suite, from the app market or deploy your own apps directly with your favourite AI tools.

cafeine ☼ Claude ☼ Grok ☼ perplexity

OpenSaaS will empower anyone with free *agentic intelligence in their SaaS services*

Agents can connect the dots across your SaaS systems, provide intelligence and execute actions

Open SaaS suite runs on your Cloud Engine...

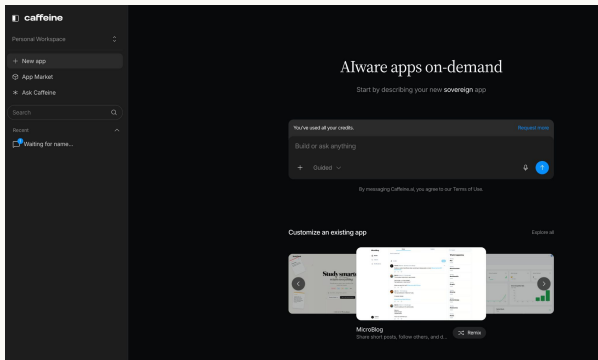


...enabling CEOs to run agentic organizations

- ☼ ☼
- “Which top customer is late paying and going quiet?”
CRM + Accounts + Email
- “Which top seller is overdue for a raise and showed less engagement recently?”
CRM + HR + Email
- “Where are the costs growing faster than revenue?”
CRM + Accounts + HR

Caffeine AI helped users to create *more than 100k apps* on ICP

An app builder that allows users to create sovereign Alware apps, just by chatting



<https://caffeine.ai>

Caffeine builds the software you need from a plain conversation. You describe it, and it is yours.

Since its inception users have built and published more than 100k apps on ICP.

Published apps can be queried in real time by AI, enabling real agentic intelligence

The AI has written over 15 billion lines of codes in the AI-native coding language Motoko

Pakistan runs *sovereign services* on Cloud Engines

MoU with the Pakistan Digital Authority. Cloud Engine distributed across national data centers.



The Pakistan Digital Authority signs an MoU with DFINITY during the INDUS AI Week 2026 in Islamabad

The Pakistan Digital Authority is running a national Cloud Engine distributed across multiple national data centers. The Cloud Engine guarantees data sovereignty and protects the apps running on it against potential data center outages and cyber attacks

On top of the national Cloud Engine, a national Chat App is under development, as well as various government services

In addition, DFINITY granted the government, the startup sector and academia 1,500 caffeine AI licenses to develop sovereign apps through chat, which deploy directly on the national Cloud Engine.

Swiss Subnet delivers *sovereign cloud* in Switzerland

Launched at Davos 2026. 13 hardware-encrypted nodes hosting Swiss cantonal governments and enterprises.



Sovereign Secure

Cloud infrastructure for the AI era. Swiss Subnet provides sovereign execution environments built in Switzerland for AI-native, regulated, and mission-critical workloads, where legal jurisdiction, technical control, and physical operation are aligned.

<https://subnet.ch>

The Swiss Subnet launched in January 2026 during the World Economic Forum in Davos.

It provides 13 hardware-encrypted nodes across Switzerland and is providing hosting services to various Swiss cantonal governments and enterprises.

Its customers value the data residency and high security features, extending the Swiss security and privacy, known from the banking industry, into the digital economy.

UNDP and DFINITY provide *sovereign cloud engines*

Enabling UNDP, CSOs and governments to use sovereign cloud and decentralized AI



UNDP x DFINITY 2026

DFINITY and the UNDP start a joined program in August 2026, that makes Cloud Engines, decentralized AI and caffeine AI available for:

1. UNDP country offices
2. Civil society organisations
3. Interested Governments, that are seeking digital sovereignty.

A *top-level domain* that maps to services on the network

A short, human-readable name in DNS for services on the Internet Computer network.

Today, services on the Internet Computer are reachable through long identifiers. A .icp name would give them a human-readable address in the DNS.

Services on the network are addressed today by an identifier such as jgwns-tqaaa-aaaao-ba5ua-cai. That identifier is stable and cryptographically bound to the service, which is the right property for machine-to-machine calls, but it is not usable as a human-facing address.

A .icp name in the DNS gives ordinary users and organisations a short, memorable way to reach the same service, while machines continue to verify the underlying identifier. Human-readable addressing today, cryptographic verification underneath. The Registry Voluntary Commitments in the application ensure that users connect the .icp domain with services that are hosted on ICP.

DFINITY Stiftung, a Swiss not-for-profit, applies as registry operator. The .icp string refers only to services hosted on this network, so its meaning is precise and its scope is bounded. The Foundation commits to the registry stability, security, and public-interest obligations that ICANN's new gTLD program requires.

Addressing a service

Today	jgwns-tqaaa-aaaao-ba5ua-cai.icp0.io
	custom domains, e.g. mybrand.com
With .icp	brand.icp

The .icp name resolves through the ordinary DNS, and points to the same service the identifier points to. Users type a short name. Machines still verify the underlying identifier.

Sovereign Cloud, *directly from the network*

DFINITY FOUNDATION

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8002 Zurich, Switzerland

RESOURCES

internetcomputer.org
opencloud.org
caffeine.ai