



OPCP

On-Prem Cloud Platform

**Protect. Empower. Heal.**

Ready for AI,  
secure for treatment.  
Host your healthcare cloud  
where care connects.



OPCP

by OVHcloud

# Healthcare transformation: where medical needs meet the digital revolution.



## **The healthcare system is at a turning point.**

Healthcare organisations, faced with growing needs, limited resources, and a rapid pace of innovation, are now under pressure to rethink how they operate. But how do you modernise without disrupting security, compliance, or data sovereignty?

## **A sector stretched to its limits.**

Every day, health facilities juggle growing emergencies and strained resources. Between an ageing population, a shortage of caregivers, and an increase in chronic diseases, the current health system is struggling to keep up with the demands. As a result, breakthroughs in clinical practice, therapies, and technology within medical research are crucial for anticipating future care needs.

## **High and adaptable digital expectations.**

Patients and caregivers expect simple, reliable, and smart tools. But too often, hospital digital technology is fragmented, slow, or not fit for purpose. Researchers face obstacles such as technical limitations, data silos, and regulatory constraints, which stifle the development of new therapies or innovative devices.

## **Innovate, yes—but boldly.**

Innovation shouldn't come at the expense of data security in AI, telemedicine, or data—nor should it create dependencies. It should be based on a sovereign, secure, and controlled foundation, particularly to support practice of care and research into treatments, pharmaceuticals, and health technologies.

# Security, compliance, and resilience: the on-prem health advantage.

Digital healthcare can't afford half-measures. Healthcare providers must balance innovation with the highest standards, navigating regulatory requirements, data sensitivity, and application criticality. Unfortunately, cloud services often fail to address the unique challenges faced by the sector.

## Healthcare's unique and pressing limitations.

### Healthcare IT systems should be built to:

- Guarantee compliance (HDS, HIPAA, C5).
- Ensure the security of sensitive data.
- Offer maximum availability, including during outages.
- Adapt to an existing, often fragmented infrastructure.
- Work on several sites, even when connectivity is poor.

Here, the shortcomings of the public cloud become clear: dependency, latency, cost, and legal complexity.

**A tailored solution: an on-prem cloud made for healthcare. OPCP is a straightforward alternative.**

**A local cloud, deployed within the facility, incorporating:**

- Compliant, certified **local hosting**,
- **Quick access** to critical applications (EHR, PACS, medical AI),
- **Interoperability** with existing IT systems,
- **Sovereign management**, without the need for a third party.

OPCP also **excels as a model for public cloud practices**, built on a controlled approach: modern **architectures**, **DevOps principles**, **automated deployment**, fine-grained access management, scalability, and more.

**This will usher in a new era for healthcare IT, with no compromises.**

# OPCP: OVHcloud's expertise, on your premises.

OPCP is based on a modular three-layer architecture.

Each layer with defined role:

- Managing the infrastructure base,
- Deploying and maintaining cloud services,
- Launching workloads.

This architectural design makes OPCP powerful, simple, and relevant.



## LANDING ZONE MANAGER

**Deployment and workload management interface.**

This provides internal development teams and software publishers with a dedicated space for deploying, managing, and maintaining applications. Each environment is isolated, traceable, and compliant—with fine-grained access, quota, and lifecycle management.

## CLOUD STORE

**Easy deployment and maintenance of business services.**

With the Cloud Store, you can deploy ready-to-use services in just a few clicks—virtualisation, containers, databases, AI, business tools all from a local, automated catalogue—which can be scaled for use in internal stacks or integration with third-party publishers.

## OPCP CORE

**Infrastructure automation at scale.**

OPCP Core fully automates infrastructure management, including server discovery, network configuration, resource allocation etc., with complete traceability, integrated security, and native observability.



## Practical applications for all stakeholders in healthcare and life sciences.

Healthcare providers **rely on a wide range of digital tools and AI platforms** for **hospital management and research**.

One requirement they all have in common is **ensuring data control, application performance, and regulatory compliance**.

OPCP, a cloud solution for on-premises use, is designed to streamline and speed up the setup and maintenance of advanced control and security infrastructure, cloud services, and developer interfaces.

**Explore the main use cases for the On-Prem Cloud Platform in healthcare.**



USE CASE | 01

## Modernising hospital IT systems with cloud-ready architectures.

Hospital IT systems are often built on complex, fragmented legacy infrastructure. As a result, modernisation is necessary to support shifts in practices, interoperability, and the expanding use of digital services. The reality is that not everything can be migrated to the cloud.

OPCP allows publishers and CIOs to expand their on-site IT infrastructure, using **modern public cloud-driven architectures**, while retaining full control over their data and environments.

### With OPCP, you can:

- **Deploy cloud-native components locally:** Kubernetes containers, microservices, S3 object storage, etc.
- **Bridge the gap between legacy applications** and newer services within a unified sovereign base.
- **Empower publishers to innovate**, without destabilising underlying systems or compromising compliance
- **Cut down on production and maintenance time**, thanks to an automated, documented, and standardised infrastructure.
- **Ensure scalability and resilience**, without dependency on an external cloud provider.
- **Pave the way for hospital IT systems** using a modular, open, and DevOps-ready approach.
- **Leverage centralised management**, enabling resource pooling, quota management, internal chargeback, SLA management, and much more.



**Modernising hospital IT systems means setting the stage for continuous development, without disruption or dependency.**



USE CASE | 02

## High-performance, cost-effective local PACS and medical imaging.

Medical imaging systems (radiology, CT, MRI, ultrasound) generate large volumes of critical data every day.

These data streams need to **be stored, secure and readily available**, without any disruption or latency and within the limits of confidentiality and retention requirements.

With OPCP's **storage capabilities**, you can host your PACS solutions on your on-premises setup, **without needing an external cloud**. It's also an economical option for managing high data volumes.

### OPCP enables you to:

→ **Store your medical images** locally on high performing, scalable volumes.

- **Natively activate replication and backup** to guarantee service continuity and data resilience.
- **Seamlessly outsource your PACS archives** to OVHcloud while retaining control over data streams.
- **Take advantage of predictable pricing**, with no per-use or exit fees, **and ultra-competitive pricing per TB**.
- **Ensure real-time availability of imaging data**, even in case of external connectivity failure.
- **Have full control of the value chain**, from sourcing and obtaining data to retrieval and long-term archiving.
- **Easily enhance interoperability** with clinical systems (EHR, RIS, VNA) through a local and open base.



**Your images are available wherever you create them, and can be securely archived.**



# OPCP

USE CASE | 03

## Local, secure, and interoperable healthcare data warehouse.

Perhaps you're looking to create a health data warehouse for consolidating your clinical, administrative, and research data, all while ensuring your infrastructure's sovereignty, compliance and performance by integrating with legacy systems.

OPCP, **gives you all the tools you need to natively** build, run, and manage a modern data warehouse. All your data management services can be deployed locally, within a controlled, secure, and certified system.

You can leverage OPCP to:

- **Host** your sensitive data **locally** in an encrypted, resilient, and isolated environment.
- **Deploy** key components **in just a few clicks**: databases, data lakes, analysis engines, and reporting tools.
- **Configure a modern data architecture** that operates independently of a public cloud, whether it's in a data warehouse or lakehouse.
- **Ensure fine-grained access management**, through the centralised management of roles and permissions, logs, and confidential information.
- **Activate a native FHIR server from the software catalogue**, guaranteeing the interoperability of data exchange with hospital and standard IT systems, or business tools.
- **Advance your analytics, AI, and management projects**, without sovereignty or performance trade offs.



**Your health data is no longer idle. It's structured, managed, and readily available to create value, and completely under your control.**



USE CASE | 04

## Locally hosted medical AI: performance, confidentiality, and clinical impact.

AI offers new dimensions in healthcare, including assistance with diagnosis, risk prediction, automated sorting, medical language processing, research acceleration and much more. And for large-scale use, AI must be **trained and deployed in a controlled**, secure, and compliant environment.

**OPCP is AI-ready by default.** It's a local platform **powered by high-performance GPUs**, offering a collection of open-source models and pre-integrated tools. This means you can build, fine-tune, and serve AI models on-premises, with complete control over your data.

### OPCP allows you to:

→ **Deploy your AI workloads locally**, with GPU acceleration (inference or training).



→ **Utilise off-the-shelf open source models** (medical NLP, vision, classification).

→ **Fine-tune your models** with your own data, ensuring your information stays within your system.

→ **Host your MLOps pipelines** to industrialise your use cases (training, versioning, clinical integration).

→ **Make decisions faster** by bringing AI as close as possible to data and users.

→ **Ensure compliance with ethical standards and regulations** by securing healthcare data within a controlled framework.

### Examples of practical uses:

→ Automated analysis of medical images (scanner, MRI, pathology).

→ Patient record sorting in emergency rooms.

→ Automated summary of medical reports.

→ Detecting subtle patterns in research cohorts.

→ Predicting post-surgery complications.

**AI in healthcare is fast becoming an everyday tool. OPCP provides the trusted platform it needs to deliver.**



USE CASE | 05

## Autonomous and secure research enclave.

Certain research projects demand significant computing power and the highest security protocols. Critical activities, such as confidential clinical studies, closely monitored group studies, advanced data analysis and proprietary R&D, require top-tier security and cannot be hosted on a public cloud.

OPCP offers a solution: **a fully isolated computing environment**, optimised for sensitive data processing and equipped with **bare-metal servers powered by GPUs** to handle the most resource-intensive tasks.

### With OPCP, you can:

- **Deploy an enclave dedicated to research**, hosted on-site without exposure to external networks (air gapped mode).
- **Run heavy computations** (statistics, AI, modelling) on bare-metal or GPU-ready nodes.
- **Guarantee data sovereignty**, even with limited access or specific contractual obligations.
- **Create independent environments for** your researchers, with access to notebooks, databases, and other R&D tools.
- **Maintain a rock-solid partitioning** between the platform and your core IT systems, while ensuring local monitoring and supervision.
- **Ensure replicability, traceability and security**: ideal conditions for robust, high-value launches and innovations.



**Your researchers need freedom. Your data needs limits. OPCP allows for both.**

# A platform designed to support healthcare now and in the future.

**OPCP is the ideal platform for tackling healthcare challenges.** Built for critical environments, it combines power, simplicity and sovereignty, putting all of OVHcloud's know-how to work wherever data is created and utilised.

**OPCP empowers healthcare and life sciences organisations to act, stay secure, and innovate** – whether by hosting business applications, modernising IT systems, protecting data, or driving innovation.



**OVHcloud for Healthcare**



**ovhcloud.com**  
[opcp@ovhcloud.com](mailto:opcp@ovhcloud.com)

## A pairing with purpose

Proven technical solution, combined with industry-specific expertise.  
Clearly, there are things we need to do together.

## Cases to develop, adapt and test

There's no shortage of use cases: edge, factories, critical sites, disconnected infrastructure, and much more. What if we focused on one or two key areas to make real progress?

## A workshop, a chat, a POC?

We don't need to put everything on hold just yet.  
Let's brainstorm, see which ideas make sense, and gradually build.