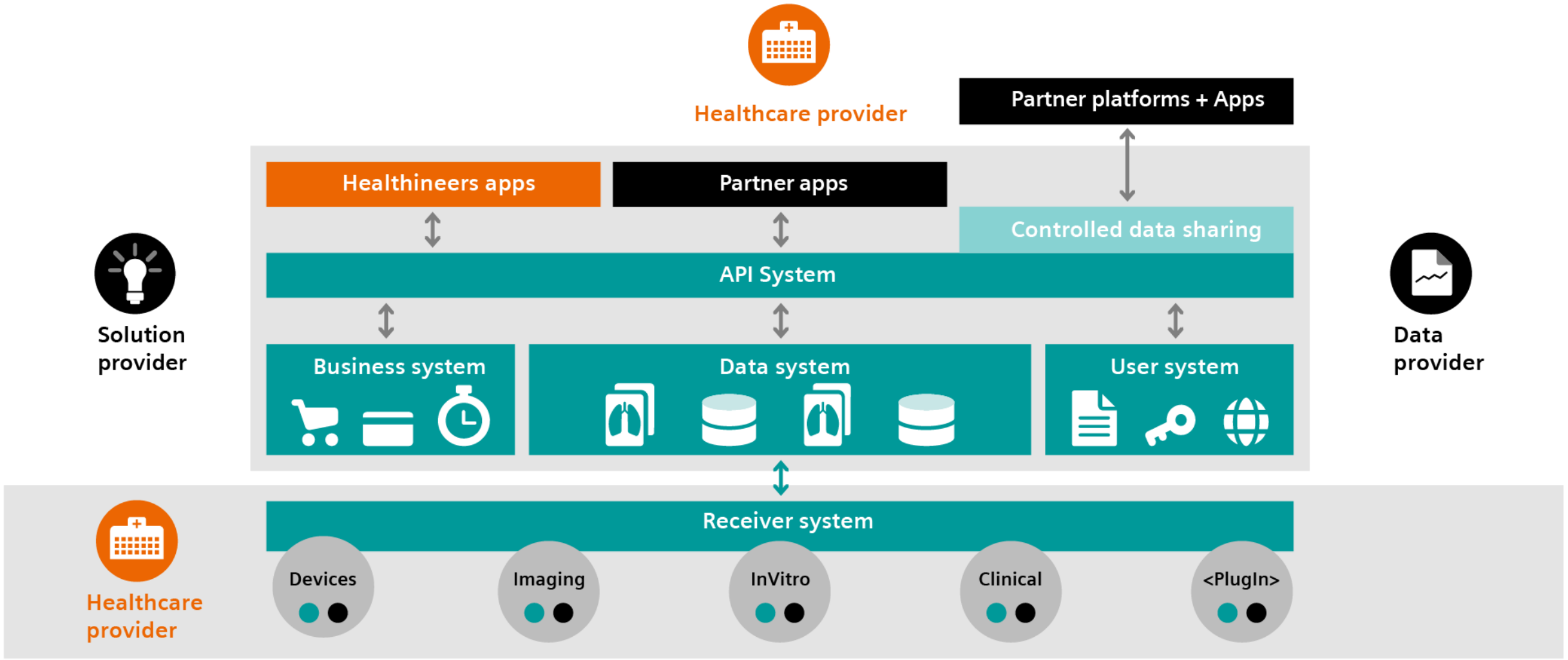
Siemens Healthineers teamplay

- teamplay consists of multiple **teamplay Core Apps** and the **teamplay Cloud Platform**
- The teamplay **Core Apps are focused on clinical radiology use cases** and offer radiation dose monitoring, scanner fleet usage and performance analysis, examination protocol management, benchmarking with other institutions and medical image viewing and sharing functionality – in sum a solution for supporting efficiency improvements in radiology departments
- The **teamplay Cloud Platform also serves 3rd-party partner apps and services**
- teamplay is the **technical infrastructure and data layer of an ecosystem platform** which is fostering a community network of healthcare providers, partner companies, research institutions and also patients
- teamplay is **built for Azure exclusively** and uses mostly PaaS and Containers
- teamplay is **fully developed, built and deployed out of Azure DevOps**
- teamplay has pioneered Cloud-based offerings and platform business models within Siemens Healthineers, now many other groups in the company are starting to adopt the model
- See also https://www.siemens-healthineers.com/infrastructure-it/digital-ecosystem/teamplay

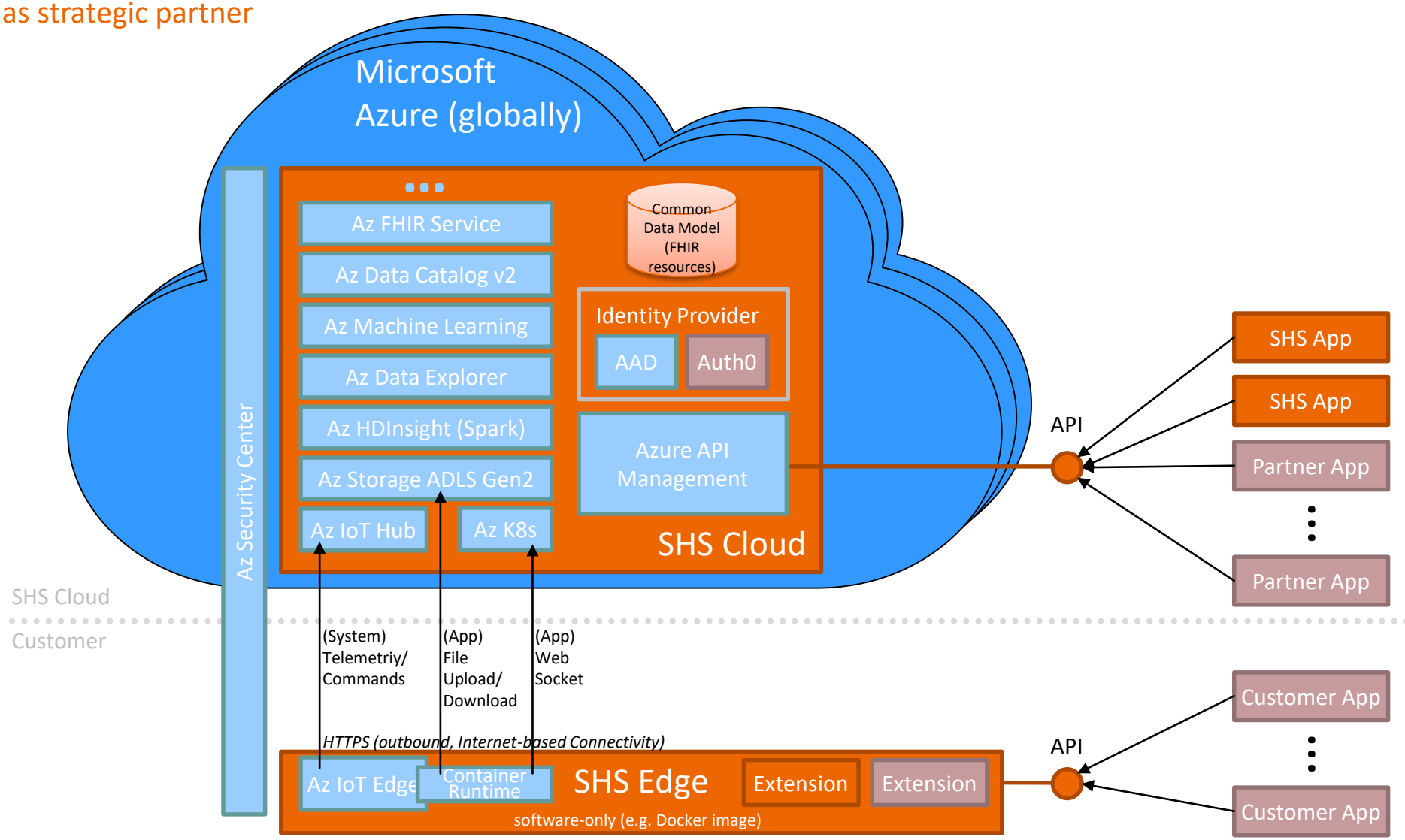
teamplay Architecture Overview

Logical Building Blocks

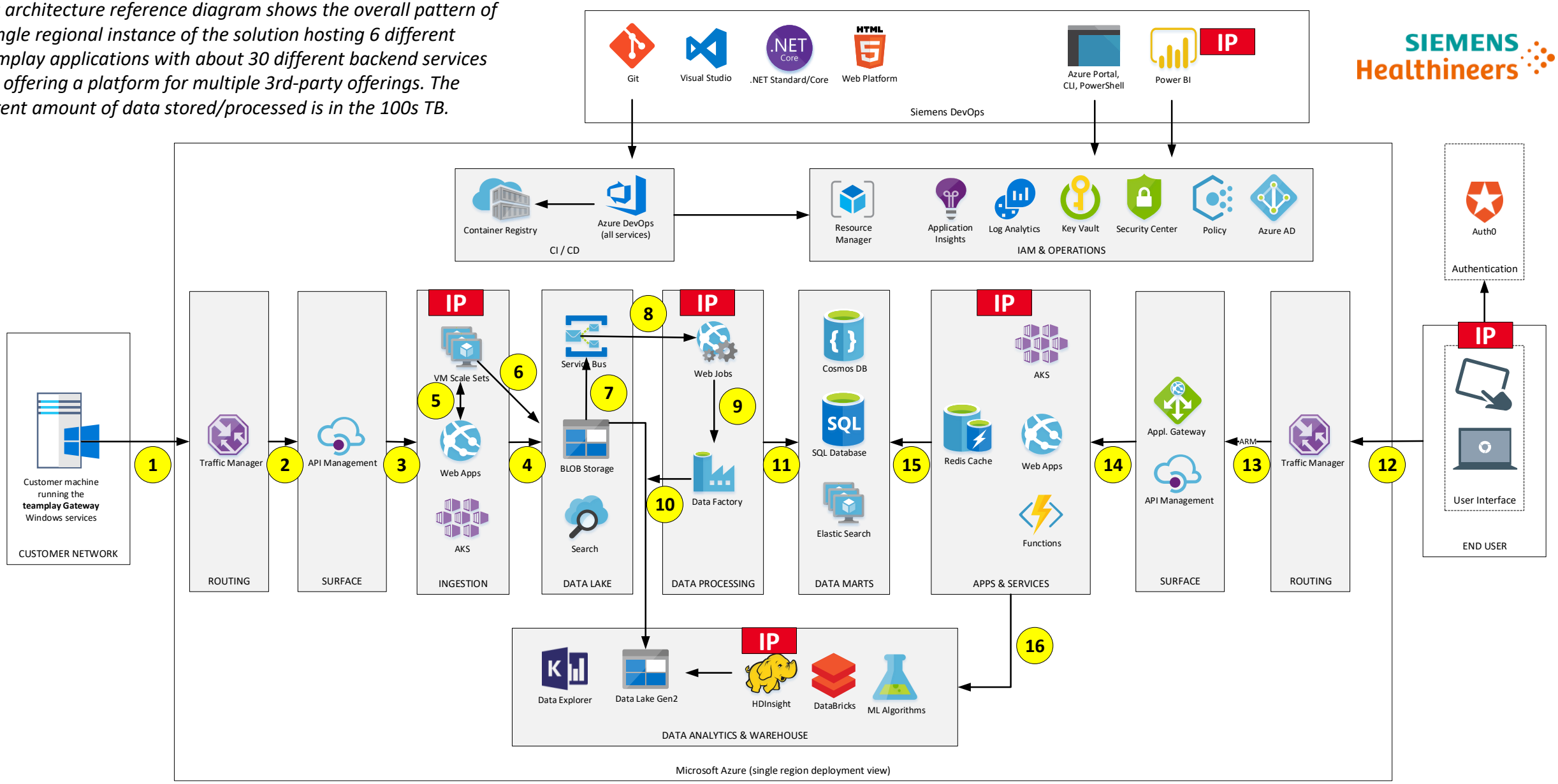


teamplay Cloud Platform

Microsoft as strategic partner



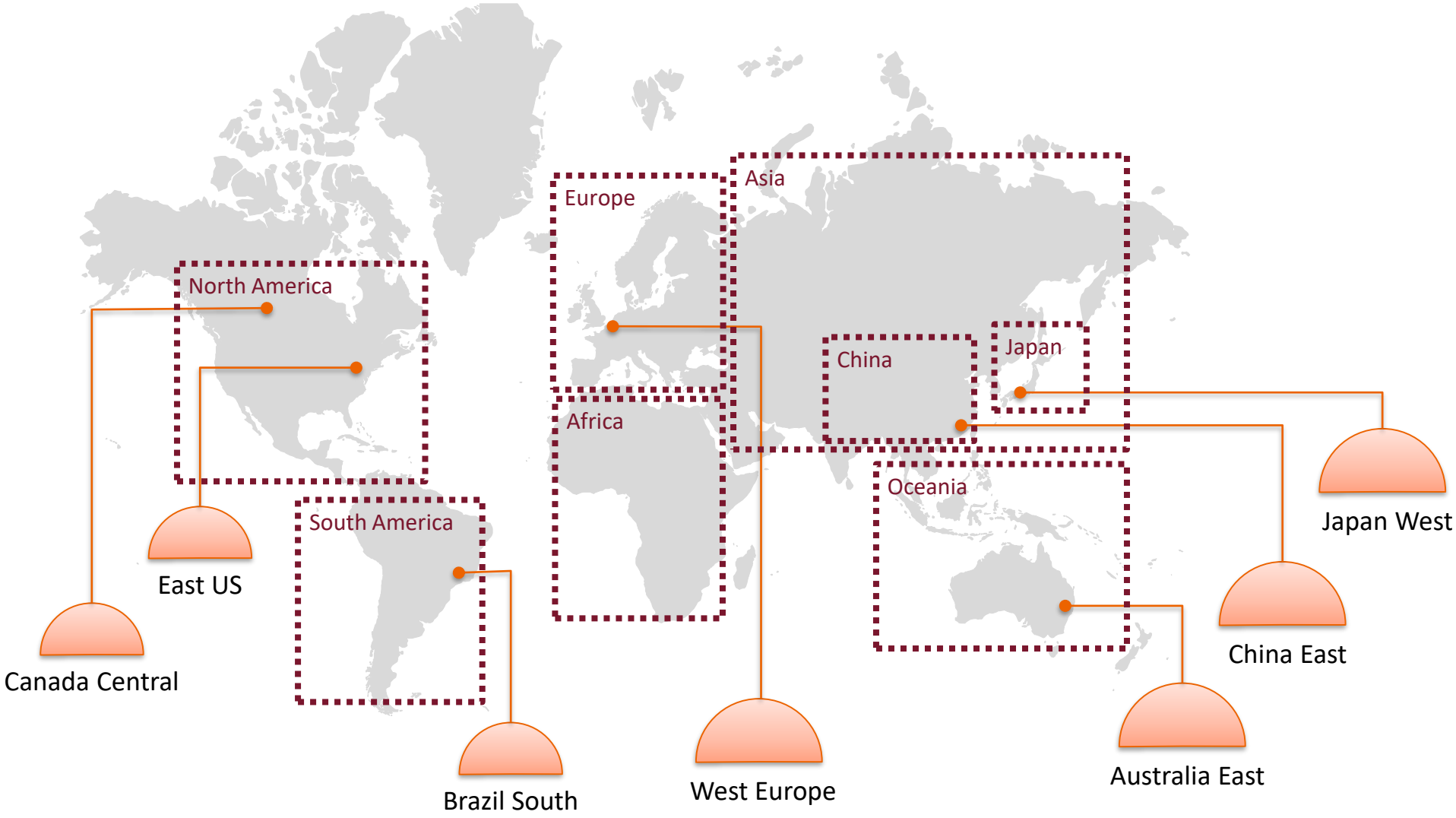
This architecture reference diagram shows the overall pattern of a single regional instance of the solution hosting 6 different teamplay applications with about 30 different backend services and offering a platform for multiple 3rd-party offerings. The current amount of data stored/processed is in the 100s TB.



1. Data upload request
2. Routing within geography
3. Request validation & policy evaluation
4. Store data base on metadata
5. Request malware scan
6. Copy data for malware scan
7. Notify about new data
8. Reliable message delivery, competing consumers
9. On message or schedule trigger copy of selected data
10. Copy selected data to/from analytics storage
11. Ingest data into data marts
12. User queries for data in app
13. Routing within geography
14. Request validation, policy evaluation, routing
15. Query and retrieve data
16. Query data from warehouse eventually

teamplay Deployment

Global Overview

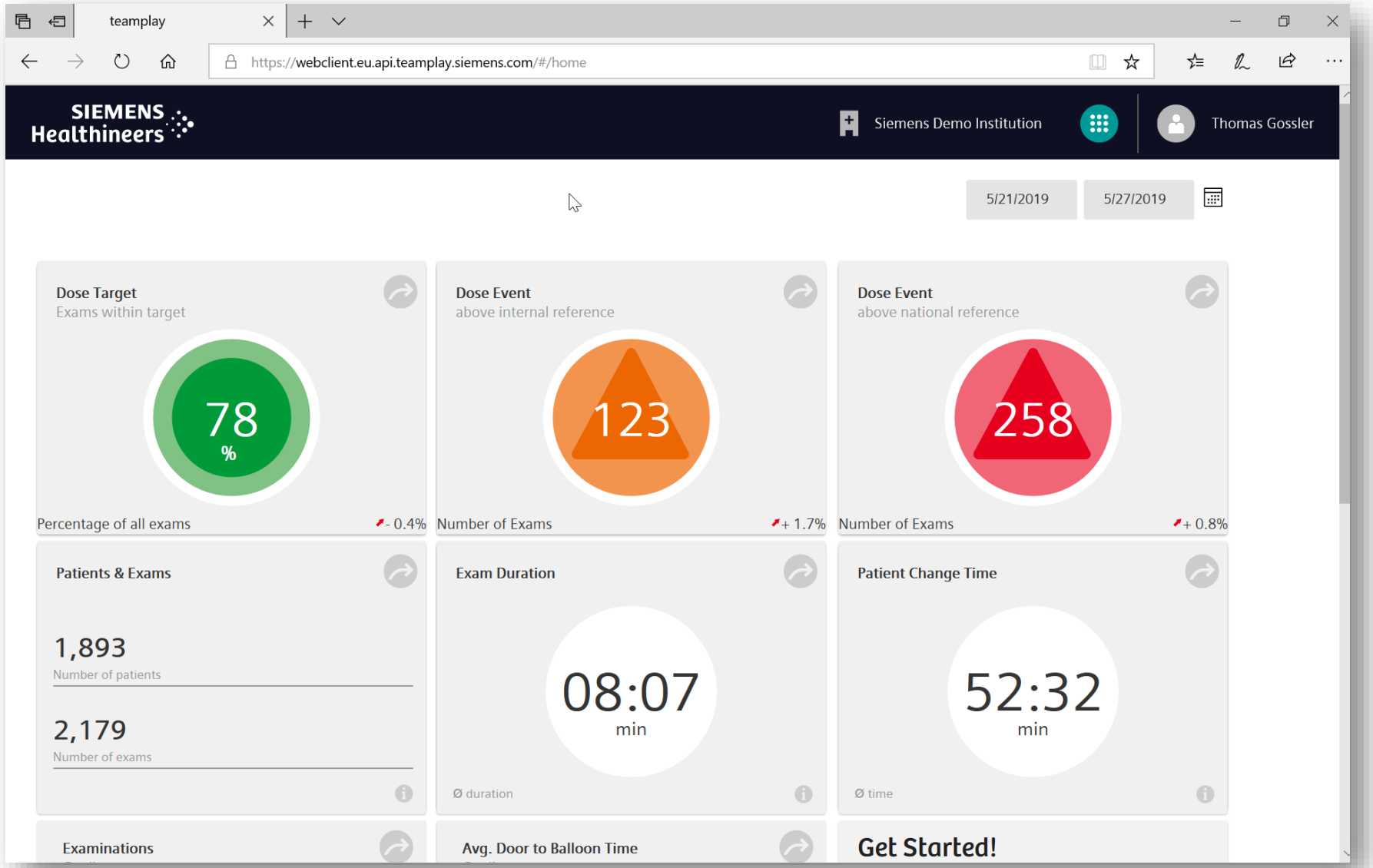


Geography

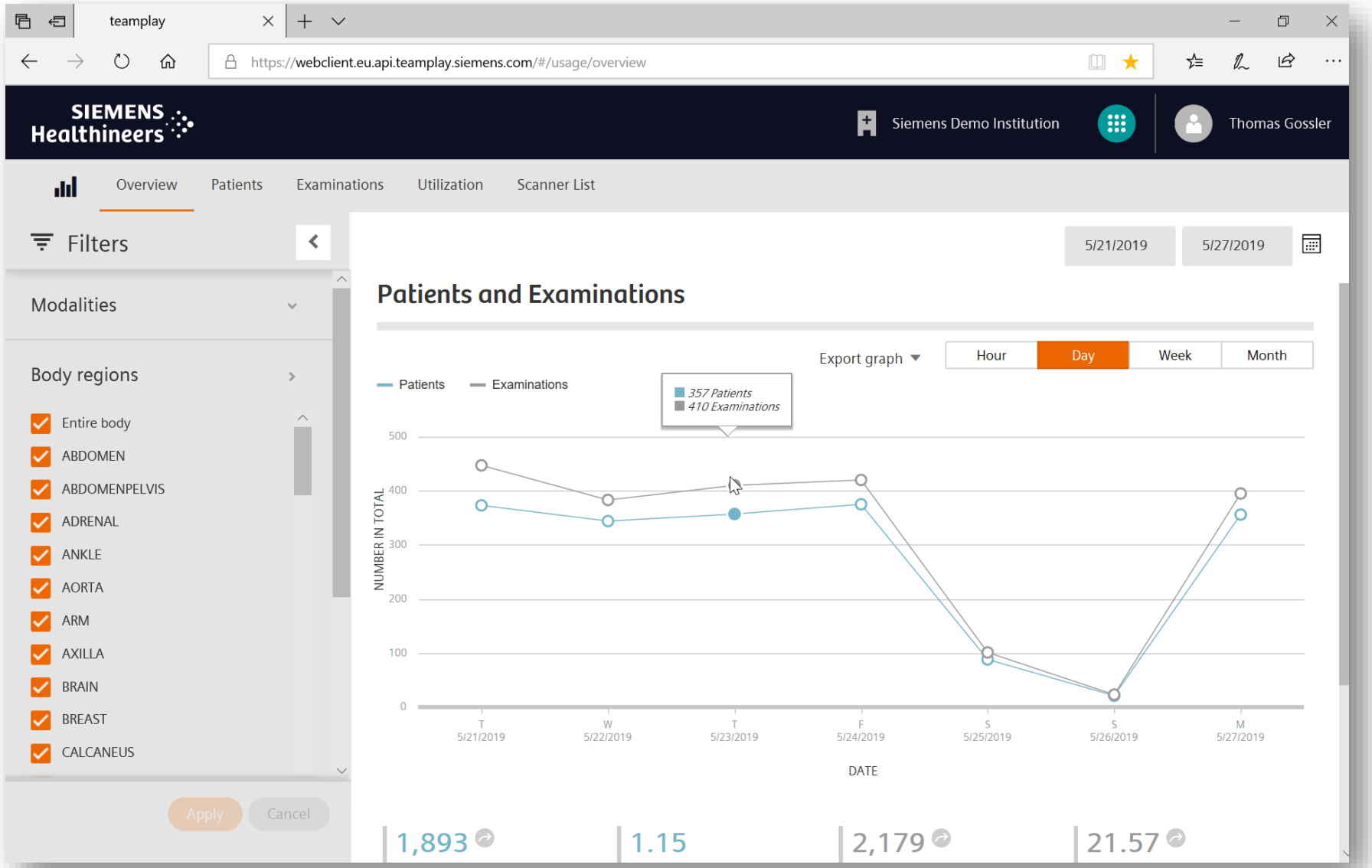
Azure Region

- One independent teamplay instance per Azure region
- Few connections from all instances to global resources in Europe
- Each deployment has its own API Management instance with a region-specific domain name

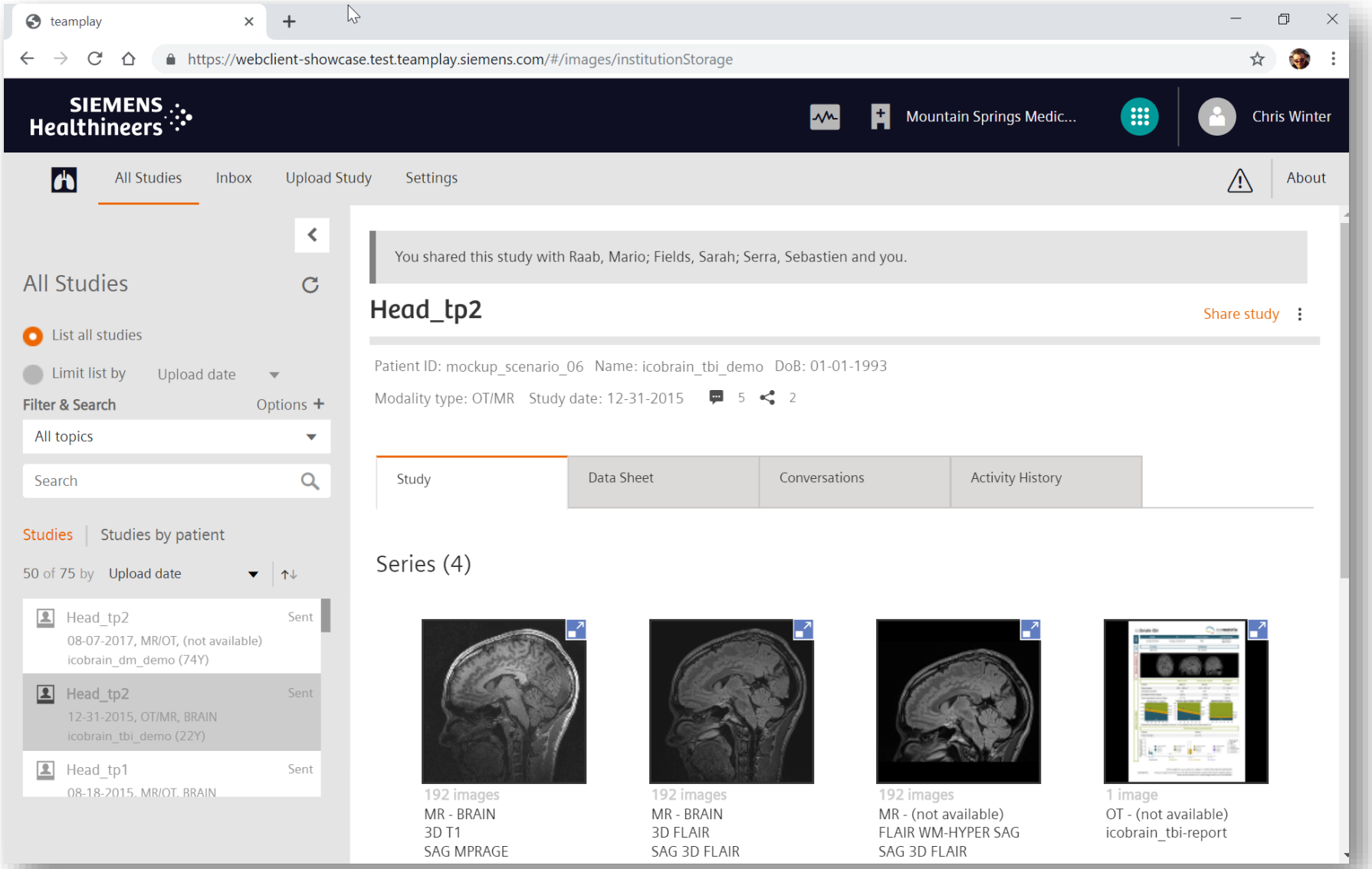
teamplay UI – Dashboard



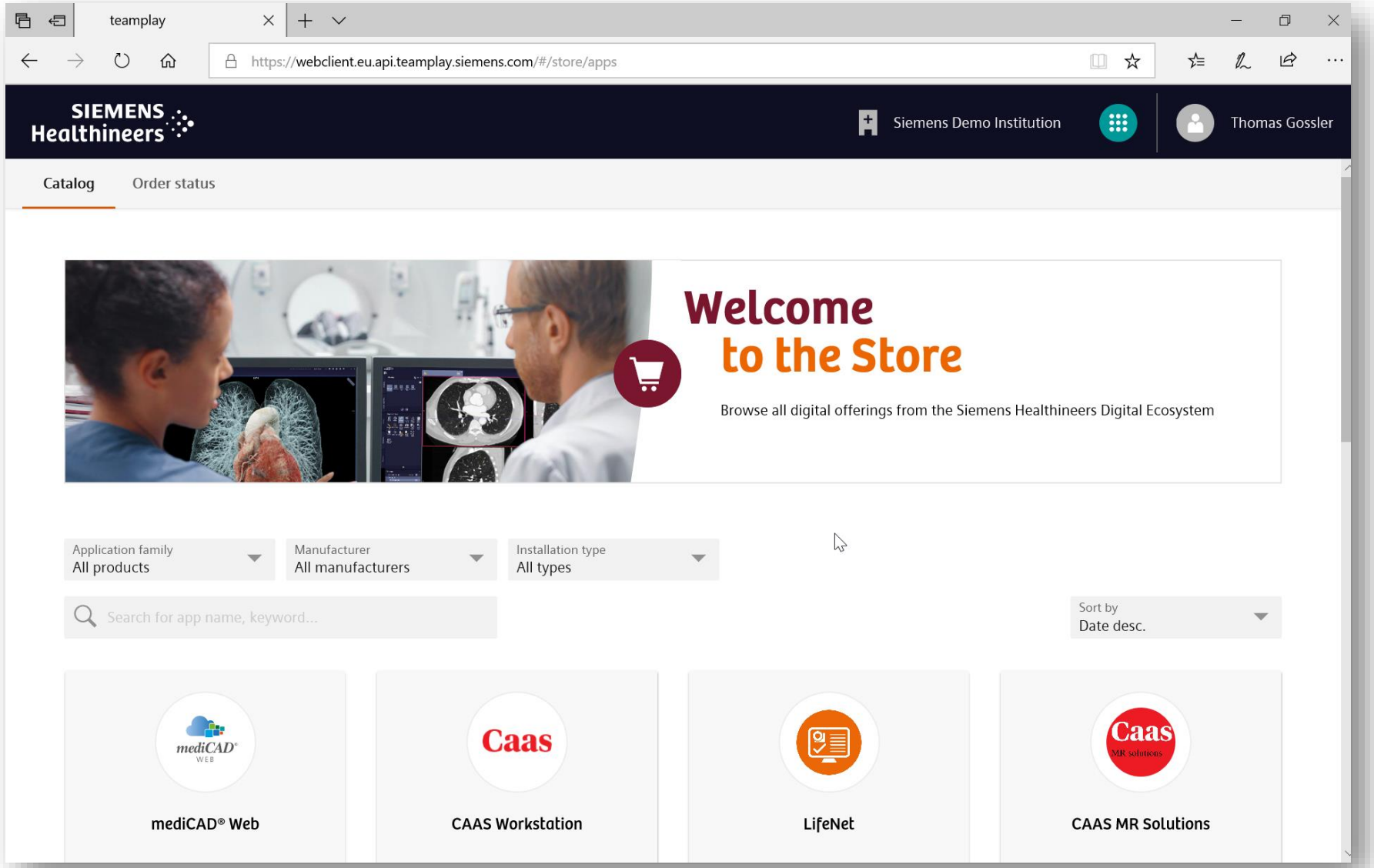
teamplay UI – Usage App



teamplay UI – Images App

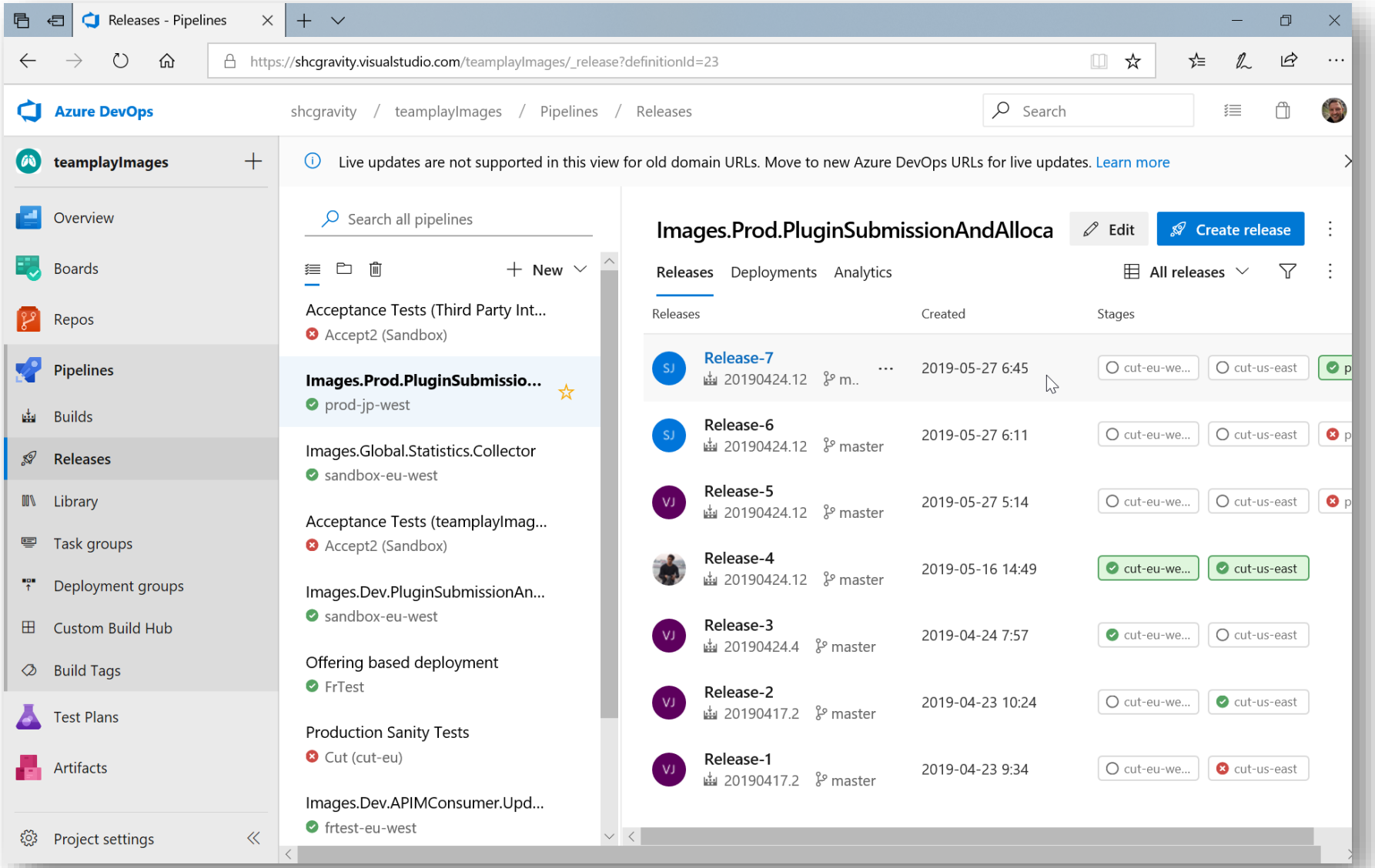


teamplay UI – Store App



teamplay on Azure DevOps

teamplay is fully developed, built and deployed out of Azure DevOps



teamplay API Developer Portal