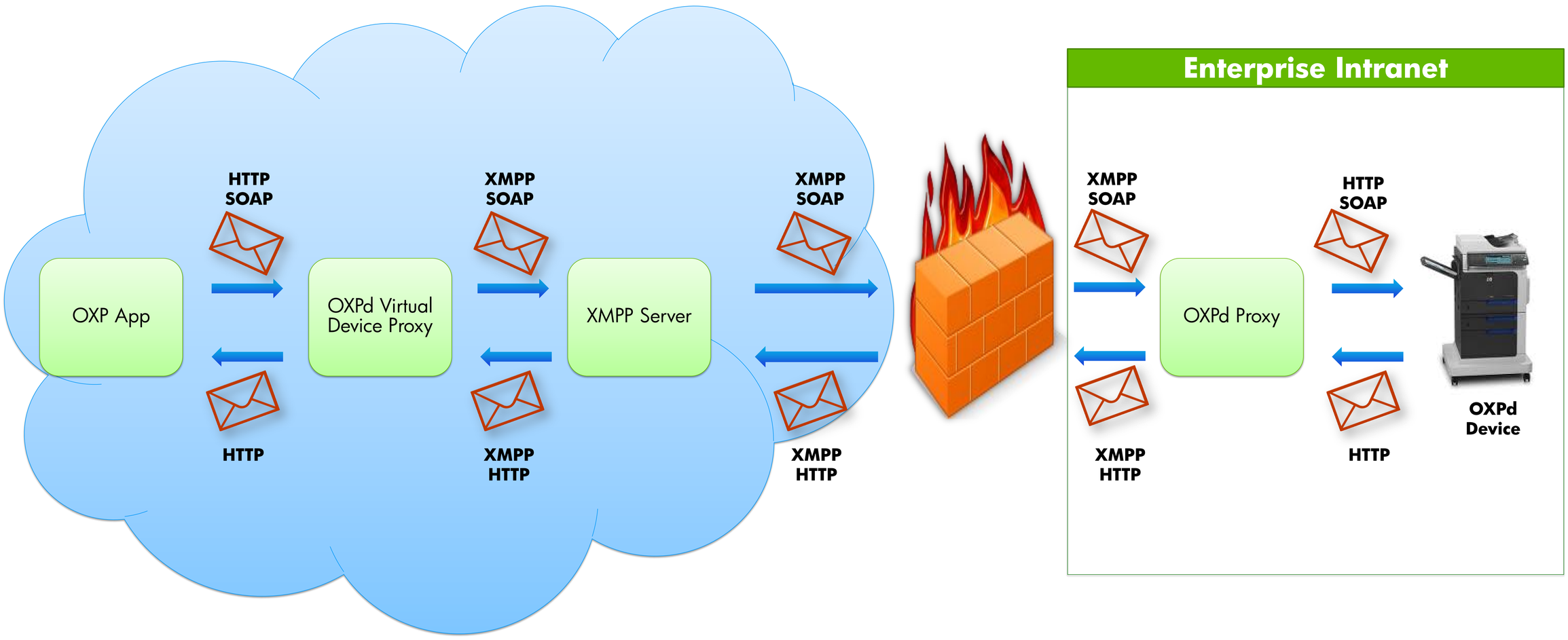
OXPD2CLOUD



Problem Statement

OXPd is central to our strategy around growth through solution and services. “Software as a Service” based offers are clearly occurring and the next stage involves cloud environments. However, due to security practices, applications running outside intranets can’t access the devices installed on the intranets. Thus, the cloud scenario is not supported with the existing solution.

Solution

By using a firewall friendly protocol like XMPP we could tunnel all the requests coming from and going to an OXP application to the OXPd device. All this without changing the application. The current solution is based on OXPd 1.6, but the idea is that any new APIs added to the OXP suite should automatically be cloud enabled too.

Achievements

We have investigated and prototyped two proxies for bridging OXPd 1.6 devices to SaaS deployed applications. I/O accessory model, security and authentication already supported. The prototype was demoed to FW/IPG teams and the response was overwhelming positive.

Challenges

Interfacing HTTP with XMPP. Manage concurrent HTTP requests inside one XMPP chat session. Scalability.

Key Technologies

Cloud, AWS, Java, .Net C#, OXPd, HTTP, XMPP

Next Steps

We plan to extend the investigation to include UI remoting and handle scalability issues.

About the program

This external project is related to GBU Strategy: IPG Connect to Connect, BU Strategy: LES Grow through solutions and software.
Research Center: Instituto Atlântico.