

OCF “Ipanema” – ISO/IEC Cloud RA Reference Text – Core Technology WG CR 3377

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5.x OCF Cloud Architecture Alignment with ISO IEC 17789

Reference [ISO IEC 17789] defines a cloud computing reference architecture (CCRA) which can be described in terms of one of four architectural viewpoints; user, functional, implementation, and deployment. Of the four viewpoints, implementation and deployment are explicitly out of scope of [ISO IEC 17789].

OCF defines an application capabilities type cloud service, providing Communication as a Service (CaaS) (reference [ISO IEC 17788]). This cloud service is provided by a cloud service provider, the mechanisms used by the cloud service provider in managing their overall cloud infrastructure are outside the scope of the OCF defined cloud service. The OCF definition is specific to the interface offered by the cloud service to the cloud service customer, specifically the cloud service user.

There are three different user views defined. In the case where the cloud service customer is an OCF Device as specified in [OCF Device to Cloud Services] then the views provided are:

- Interface for the OCF Device to provide information to the cloud service
- Interface for the OCF Device to retrieve information that has been provided to the cloud service

In the case where the cloud service customer is another instance of a cloud service as specified in this document then the view provided is:

- Interface for the other cloud service instance to retrieve and update the information that is provided via the cloud service

The OCF cloud service pertains specifically to a cloud service user, there is a single applicable cloud service activity, that of "Use cloud service" defined in clause 8.2.21 of [ISO IEC 17789].

Credentials for the user of the cloud service are provided using OAuth2.0 as defined by RFC 6749. The cloud service, either itself, or leveraging an external authorization server, provides a bearer token that is required in all requests from all cloud users. Please see clause 7 and [OCF Cloud Security].

All connectivity between a cloud user and the cloud service is via mutually authenticated TLS; see clause 7.1 of [OCF Cloud Security]