

GICTF / DMTF Work Register
Version 1.0a
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Alliance Organizations

Global Inter-Cloud Technology Forum (GICTF) and the [Distributed Management Task Force](#) (DMTF)

Background

GICTF, organized with the approval of Ministry of Internal Affairs and Communications of Japan, is a non-profit organization for standardization in the field of cloud computing technologies and interfaces to achieve inter-cloud collaboration. Several member companies of GICTF are also DMTF members.

Alliance Partner Mission

Since 2009 GICTF is contributing to the promotion and development of inter-cloud collaboration technologies and standards. In June 2010 GICTF published a whitepaper on functional requirements for designing inter-cloud collaboration interface on resource management (in Japanese).

Based on the white paper, GICTF proposed the inter-cloud interface concept to ITU-T Focus Group on Cloud Computing, and the issue is now being discussed in ITU-T Study Group 13. GICTF is now preparing a contribution, which is to be submitted to SG13 in June. The document would include the basic terminology of inter-cloud ecosystem (such as actors and roles), basic inter-cloud collaboration use cases and information flow (or procedure) examples.

Alliance Benefits

The proposed inter-cloud use cases are supposed to include data center resource deployment between different cloud providers. Since standards on platform independent, interoperable system management have been developed by DMTF, its resource model (CIM) and standards are closely related to the use case.

DMTF is also a leading organization on cloud management standardization and alliance promotion. Currently DMTF is developing an open cloud management interface for cloud users and providers, called CIMI (Cloud Infrastructure Management Interface). CIMI specification v.1.0 has been just published in this May¹.

CIMI can be a good reference to connect GICTF's inter-cloud interface to DMTF standards. However, current DMTF cloud management model does not assume collaborative activities between two providers or between a service broker and a provider, and CIMI v1.0 use cases are limited to basic ones.

¹ DSP0263、Cloud Infrastructure Management Interface (CIMI) Model and REST Interface over HTTP, http://dmtf.org/sites/default/files/standards/documents/DSP0263_1.0.0d.pdf

Another related topic is the alliance between DMTF and TM-Forum, a standardization organization for telecommunication services. They are currently coordinating their terminologies and system models (i.e. CIM for ICT vendors and SID for telecom service providers). Their work does not include designing inter-cloud interface or related network protocols so far, but their coordination work should be closely related to GICTF activities.

Standards Development

From above observations we can see the following possible liaison activities between GICTF and DMTF.

1. Coordination on cloud management model/terminology

GICTF is working on the coordination of cloud eco-system model/terminology including multi-provider collaboration. DMTF is more focused on cloud management model for a single provider. Two parties can collaborate to coordinate their model/terminology to connect their models and interfaces smoothly. DMTF-TM Forum coordination work can be a reference for this work.

2. Coordination on inter-cloud management use cases and resource models

Upon agreement on the cloud management mode/terminology, two parties can work on the coordination of inter-cloud management use cases and resource models, which could be applied to future versions of inter-cloud interface or CIMI interface.

The joint collaborative work can contribute the development and adoption of the standards for different cloud computing environments and services collaborating together without preparing vendor specific and/or domain specific customization effort.

Milestones / Dates

The work will start with bi-directional exchange of information provided by both parties. Below is the list of documents/specifications that will be provided.

By GICTF:

- Intercloud Interface Specification Draft (Cloud Resource Data Model)
- Intercloud Interface Specification Draft (Intercloud Protocol)
- ITU-T SG13 Contribution documents (in June)

By DMTF:

- DSP ISO102 v1.0.0, Architecture for Managing Clouds (whitepaper)
- DSP0263 v1.0.0, Cloud Infrastructure Management Interface (CIMI) Model and REST Interface over HTTP
- DSP2027 v1.0.0, Cloud Infrastructure Management Interface (CIMI) Primer

The work will begin with the discussion of the relevant cloud model and management use cases. Working groups responsible for the coordination work in both parties would be assigned later. Details of the discussion schedule, milestones, and deliverables are specified by the groups

Work Register Review Date

The work register should be formally reviewed and updated annually.

Resources Identified / Points of Contact:

GICTF:

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Corresponding GICTF Work Register Document

None

Approved by the DMTF Board of Directors; Board Resolution 2012-06-13, on 6/21/2012.