



OCCAID Membership Fees and Services Implementation Service Realignment Project

November 6, 2005

Abstract

In 2005, we have seen a productive and significant growth for OCCAID. More downstream sites have been connected and overall traffic on the network has been increasing more so than ever before.

While everyone at OCCAID is very content and excited with the increasing network traffic and productive use of the services being offered at no cost, the management staff has come under an increasing pressure to begin formulating a plan to (a) reduce the operational and financial burden on the sponsors by either paying them to recover their cost or other equitable arrangements, (b) join more exchange points to increase settlement-free interconnections to not only distribute the IPv6 traffic, but the tunneled IPv4 traffic itself, and (c) secure service level agreements with infrastructure partners under equitable payment structure to ensure rapid recovery and resolution during a critical network outage.

It is important to note that under the current growth patterns, OCCAID will soon need to prepare to share the financial burden that is taking toll on its infrastructure partners.

In order to continue to ensure the goals of the organization, the board of directors is forming an internal working group to come up with a master plan of OCCAID's service offerings to the community, including a structured asset and financial management to compensate its infrastructure sponsors. The name of these structured changes is to be called the Service Realignment Project (SRP).

Three-Phase Plan

The Service Realignment Project will be implemented in three phases to ensure minimum inconvenience to our users and partners possible.

Phase I: Defining Membership Types

Paying and Non-Paying Members

We will identify two classes of members, (a) General Members, those who will pay for being a member of our community and (b) the Associate Members, those who will be sponsored at free of charge.

General members who pay for services will consist of any entities, commercial or non-profit, who wish to acquire connectivity through OCCAID's infrastructure.

Associate members are those who have been sponsored to join OCCAID at free of charge. Associate members receive same quality of service and treatment as being customers of OCCAID as with general members. An example of associate membership would be a public beneficiary project or research group who is granted a sponsorship for collocation and connectivity through one of OCCAID facilities. Furthermore, any entity sponsoring or otherwise providing free infrastructure related service to OCCAID is automatically granted an associate membership.

Payment Structure for General Members

Because OCCAID is a non-profit corporation, it will only assess charges that are necessary for the basis of delivering its services and operating the company. General members will be assessed a membership fee as follows:

Fee Structure for General Membership

Type	Annual Pricing
Corporations/Commercial Entities	\$5,000 per annum
Educational entities (e.g. University, K-22, NREN, etc)	\$2,500 per annum
Charitable non-profit corporations	\$2,250 per annum
Any entities providing contributions to OCCAID.	No charges

Sponsorship Opportunities (Conditions for Associate Membership)

Acquiring funding for IPv6 is difficult for many entities that are newly connecting to the IPv6 Internet, regardless of whether they are for-profit or non-profit. One of the key reasons for this difficulty is because often times IPv6 is introduced by an engineer or a technical manager who is at the lower end of the chain of command. It is very difficult for them to request funding for IPv6 connection when there is no return on investment or revenue opportunities in doing so.

To address this problem, ISPs and organizations who face challenges of acquiring funds may contact one of OCCAID's existing general members, or external partners participating in worldwide IPv6 awareness efforts. Such external partners include TENET for South African educational networks, Consulintel (<http://www.consulintel.es>) for internet service providers and the general IPv6 community, and SixXS (<http://www.sixxs.net>) for end users.

These partners and existing general members of OCCAID may sponsor a new entity for an associate membership to OCCAID, thus being able to receive service and customer support at free of charge. Note that only paying general members, entities providing support for OCCAID (i.e. Host.net, TowardEX, Kewlio.net Limited, Terremark, KCNAP, MidPhase, etc) and strategic partners (i.e. Consulintel) may sponsor a new entity for an associate membership. Associate members or otherwise any other entities receiving sponsored or free connectivity may not sponsor another party for an associate membership.

Upon acceptance of sponsorship request by a regular member, the request is forwarded to the Program Committee, who will make a decision through a consensus in accepting member's application. Upon acceptance of request, the JTC (Joint Tech Coordination) group of OCCAID will work in close consultation with the field engineers and our strategic partners to determine and implement the best strategy to connect the sponsored member to our network.

Connection Fees and Provisioning

The aforementioned fees only cover for the membership. OCCAID will not assess any additional fees or connection fees to procure a connection to its members. However, the member is responsible for any and all local loop charges and cross-connect charges related in order to procure the service. A tunnel connection may be provided if native options are not feasible. If both parties determine that no connection can be established to the OCCAID network, and if the member does not wish to utilize a tunnel, OCCAID will refund half of its first year membership fee.

Associate members are also responsible in paying for their own local loop and/or cross-connect charges to acquire service. Again, a tunnel may be used if native options are not feasible, or if funding for local loops and cross-connects is not available.

Grandfathering existing members

All existing connections made to OCCAID network as of date, free of charge, will be grandfathered and remain free of charge. These grandfathered entities will not be charged any fees as a result of maintaining their connection and will receive the same support and service as with other members. However, any requests to add additional connections to OCCAID network will be denied until such entity acquires a general or associate membership status.

Phase II: Initial Asset and Finance Management

As soon as OCCAID begins receiving its first payment from a first paying member, it will immediately begin a gradual process of upgrading and retrofitting its network infrastructure to better deliver services.

1. Acquisition of Commercial IPv6 and IPv4 Global Transit

Upon collection of sufficient funds to operate the network, the Executive Council and the JTC will attempt to contact appropriate parties from Cable & Wireless and Tiscali to negotiate pricing for us to receive commercial service for both IPv4 and IPv6. Upon successful acquisition of commercial transit, we will shut down our other free IPv6 transits or otherwise reduce them to backup medium or convert them to settlement-free peering, as needed.

Additionally, it is important to note that any transit provider we choose for commercial transit must be able to provide us with uplink ports in all possible physical locations, minimum of one port in Europe, and minimum of two in North America. Failure to provide this port diversity means we will need to look for a different transit provider.

2. Join Additional Exchange Points

With additional funds acquired, we will immediately use such funds to join key exchange points in Europe and North America, including AMS-IX, LINX, PacificWave and Equinix.

We will also open dialogue with existing exchange point sponsors to discuss whether we can maintain sponsored connectivity to their exchange point or if we need to begin paying for service.

3. Backbone Transport Upgrades and Revising Collocation Agreements

After expanding the network and joining the key exchange points, when additional funds are available by new members signing up, we will begin to identify key transport paths on the existing OCCAID network that will need to be upgraded. These key transport paths include those that are participating under the Gigabit Plus Initiative, a project to upgrade eastern seaboard and partial mid-west section of the OCCAID network to multi gigabit. We will discuss with our collocation and transport service sponsors (i.e. Host.net, MidPhase, Kewlio.net Limited, etc) at each key location to arrange equitable financial compensation for their services, and to secure increased service quality and commitment by essentially becoming their paying customer.

4. Retrofitting Key Core Nodes

As more funds become available, we will upgrade the entire OCCAID core network with new routers and multi gigabit interfaces. Depending on location of the network, we may need to further reserve additional funds for logistics and travel expenses in order to have one of our engineers travel on-site for installation. For locations where our sponsor can provide us with sufficient and comfortable level of remote hands, we will simply ship the new equipments and network configuration diagram to them for physical installation, with their approval.

A typical OCCAID POP under new upgrade will consist of a switch, a core router and a server for SixXS gateway. The switch will provide link aggregation and tapping the layer3 network segment into the core transport ring. Expected pricing for a typical OCCAID POP is estimated to cost approximately \$6,000 for equipment purchases, including discounted software licensing.

Phase III: Continuing Asset and Finance Management

Once Phase II of the project is underway, we need to begin the process of managing our financial assets throughout the fiscal year. We have identified some of the key requirements below.

Compensation for Board of Directors

As outlined under the company Bylaws, the members of the Board will receive no compensation for their services to the company. However, any travel and incidental expenses incurred by them on behalf of the organization shall be reasonably reimbursed.

Compensation for Employees and Outside Consultancy

The Board will unanimously come to a decision in deciding compensation for hiring employees to carry out the various tasks. In addition, funds must be reserved for paying professional services to OCCAID's partnering organizations and outside consultants for their services (i.e. accounting, remote hands support, network management expertise, legal counseling, etc).

Financial Officer

We will further need to hire a financial officer to manage the finances of the company, including complying with all federal and state tax regulations. The Board will need to come to a decision before end of the first fiscal year to address this requirement.

Liability and Damage Insurance

Additionally, we will need to secure insurance coverage for OCCAID's operations, both in liability and incidental damages (such as fire, natural disaster, injury, etc).

Network Operations Budget

Lastly, majority of the company's operating budget will be devoted to network operations, as OCCAID is a non-profit R&D communications company. This includes payment for network infrastructure, reserve funds for travel and incidental expenses, spare equipment parts and professional services.