

2009-04-30 Cell Janus Delivers Cost-Effective Solution for Broadband FTTH Services

Introduction

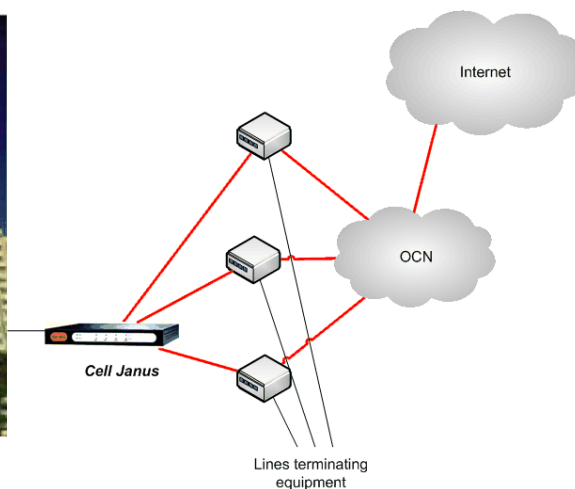
Majority of households today rely on DSL lines to gain access to the Internet. Although IP broadband services or Metro-Ethernet network services are highly desirable and sought after alternatives to traditional DSL service, these services have not as completely available. The reasons are for this range from technology limitations, to business and deployment/distribution issues. In Japan, Large carriers have been aggressively deploying their FTTH (Fiber-To-The-Home) infrastructure in conjunction with its broadband service. It offers three types of service: Basic Type, Mansion (Condominium) Type and Family Type. Connections speeds range between 10 Mbps and 100 Mbps and even higher.

Innovative Deployment of Janus Technology into Japan's Network Provider

One of the largest Internet Service Providers (ISP) in Japan has begun offering 1 Mbps to 10 Mbps or higher Internet service in large condominiums, of "Mansions". Residents of these Mansions, now have access to very high-speed Internet connections, opening a whole new world of multimedia and interactive applications. This ISP is utilizing the primary lines from traditional carrier infrastructure. However, in order to make the offerings even more affordable, This ISP needed a way to aggregate a number of tenants onto one or multiple broadband connections. In addition, This IPS needed a way to offer back-up capability in case one of the primary connections shut down. In addition, additional bandwidth can be delivered with no charges to the customer's network configuration.



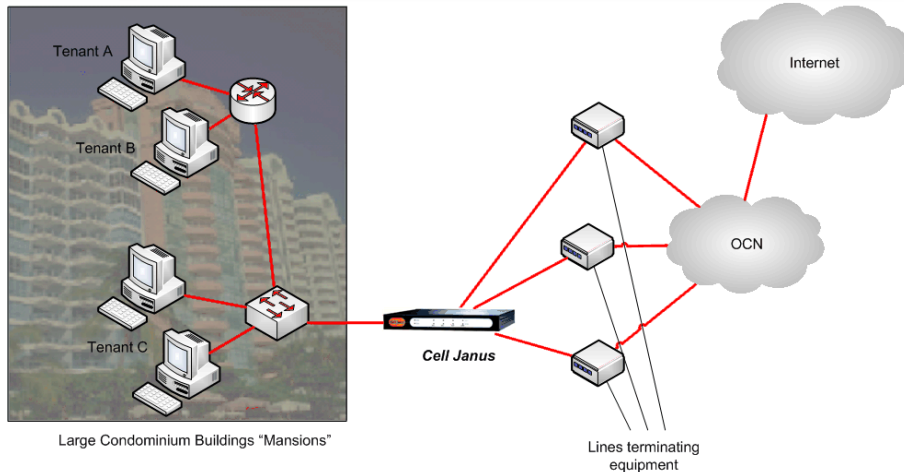
Large Condominium Buildings "Mansions"



Cell Janus provides for multiple B-FLET's line aggregation as well as back up

Simple Integration with Existing Network Topologies

The ISP carefully evaluated the feature set and architecture of the Janus (iSurfJanus, a Japanese brand name deployed in Japan) family of products. Their conclusion was that the products contained all the essential features which were required to deploy the products in the "Mansion" offerings. Specifically, the Janus products had: DHCP Server/Client, DNS Server, Firewall, very high performance, as well as the required pricing structure in order to support a successful business model.



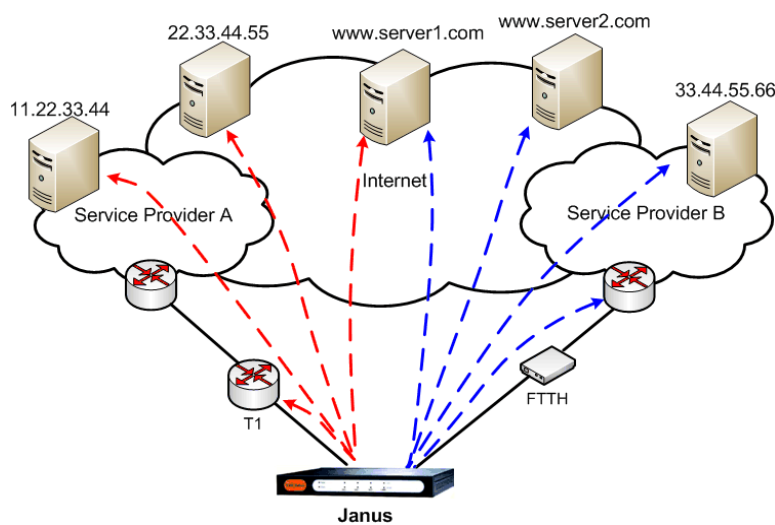
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Multiple Service Connections for Increased Availability

ISPs, like many broadband network services, have suffered from the perception that they experience a higher occurrence of network outages. Worse, sometimes the outage may be for reasons other than the ISP, such construction or repair activities, weather, etc, Cell Janus provides a simple method to resolve these issues: use more than one Service Connection. When the Service Connection goes down (technically or physically) another Service Connection is likely still available. Using multiple Service Connections, two links with 95% availability can combine to give your network 99.75% availability. Cell Janus is designed to simply and easily support multiple Service Connections, providing the intelligent IP mapping needed.

Automatically Detects Physical and Network Outages

There are many reasons why communication may be lost through a particular WAN link. A cut in the fiber cable, a crashed DNS server, and ISP router problems can all cause connectivity problems. With this in consideration, Cell Janus uses several methods to determine the health of each WAN link. At the most basic level, it continually checks with the default gateway for physical connectivity. For network-level outages, Cell Janus monitors (PINGs) up to 4 target URLs or IP addresses configured by the Network Administrator.



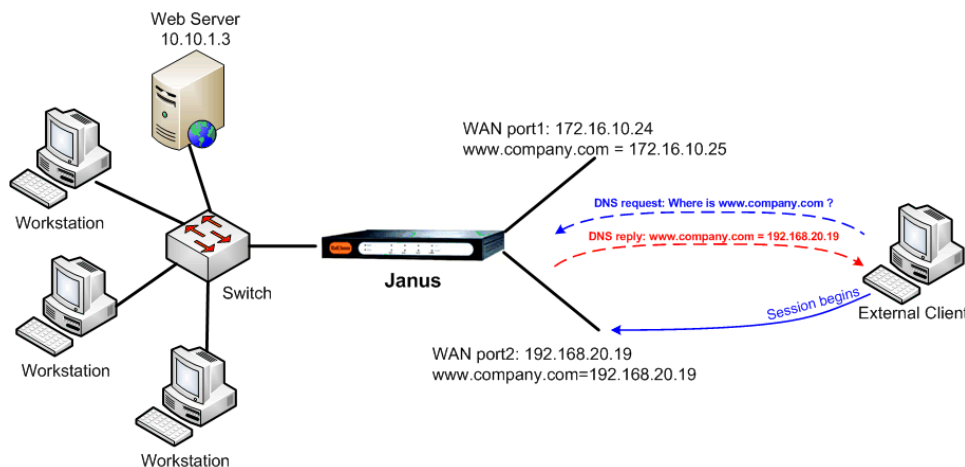
Maximizes Combined Bandwidth

With multiple connections to the Internet, how do you use all the links for your network when these connections may have different bandwidth capacities and may be connected to different Service Providers?

The answer is dynamic session-based load balancing. Cell Janus load balances individual sessions between links, distributing traffic based on the bandwidth capacity of each link. This allows you to combine FTTH services with a T1 and DS3 Internet connection. The session-based load balancing also helps optimize application performance in multiple Service Provider environments because it keeps related traffic (individual sessions) on the same network. Without it, applications may receive packets that are badly out of order because they traveled across different networks. This degrades application performance and makes VoIP and Video conferencing un-usable.

Balances Internet Traffic to Hosted Internet Servers

Many deployments may have at least one hosted Mail, Web or FTP server. It is critical that external users reach these servers all the time. Cell Janus provides two key services for these hosted servers. First, it provides for continued access to these servers even when individual links fail. Second, it load-balances the inbound traffic for these servers to minimize the changes that one link may become saturated when another is available. Cell Janus uses an integrated DNS server and acts as the Domain Authority for hosted servers. The outside world can make DNS requests through any link connected to Cell Janus (requires DSL with static IP addresses on those links). Cell Janus then uses DNS to direct those sessions to the appropriate link for load balancing or backup requirements.



Optional Integrated Stateful Firewall on Each Link

Cell Janus provides an integrated Stateful Firewall. It provides control for predefined and custom TCP/UDP services, blocks many common attacks, and can control access down to the individual host level. The firewall, and each of its services, can be enabled or disabled on each WAN link. Cell Janus can also be deployed with an existing firewall. Cell Janus also supports PPPoE, DHCP, and NAT services (1:1, 1:Many, Many:Many, Port translation) on each WAN port.

About Cell Technology

Cell Technology headquartered at Hong Kong SAR, a network & security technology provider specializes in design, develop and deliver innovative and intelligent IP packet processing platform into software and hardware appliances. Cell product solutions including Cell IPS, UTM, CMC, Janus, TMS, NetsVision and NetsAccess address the business needs that optimize the IP network performance, secure the network security and resiliency, and manage the quality of IP services. For more information, please visit www.cell-technology.net.