

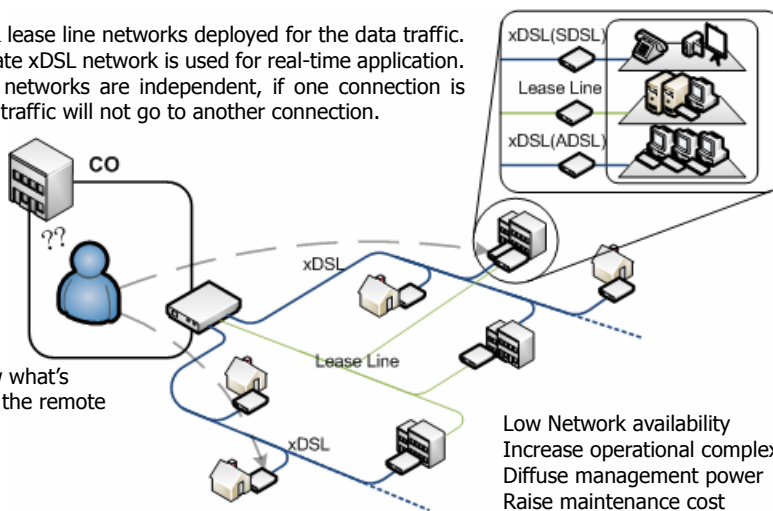
2010-08-31 Cell Managed Janus Multi-WAN Solution for Carrier Network Resiliency Service

Background

Nowadays, businesses rely upon the Internet network access to communicate with partners and customers, support web applications, and continue developing the business. To anticipate the needs of business requirement, most of carriers and network service providers require to provide a robust, secure and seamless WAN links connection in order to attract the new customers to gain the market share, and maintain the fast business growth.

During the development of new business opportunity and lower network resource cost, the existing network infrastructure needs to become more simple, flexible, and manageable. It can lower the operating costs and enable more services delivery demand by the corporate customers. The carrier Ethernet market is changing continuously. To maintain competitive advantage, carriers require a complete managed network service solution for any kinds of corporate customers.

The DSL & lease line networks deployed for the data traffic. The separate xDSL network is used for real-time application. Since two networks are independent, if one connection is failed, the traffic will not go to another connection.



Cell Managed Janus Solution

It is a challenge to ensure the reliability and stability of the Internet network access in every remote host. It comes up the problem of the complete network monitoring and lack of management of remote host network usage throughout the infrastructure. In order to resolve this issue, Cell Technology provides a comprehensive managed Janus solution to carriers or corporations suffering this network challenge. Cell managed Janus solution includes Cell Janus, a Multi-WAN Service Gateway, and Cell iCMS-Janus, a central management platform of the Cell Janus devices.

Cell Janus Key Features

Cell Janus is a multi-home of network device that can provide network services in the edge. It provides following services:

- **WAN Load Balancing**
 - Support traffic optimization and load balance across the network WAN links.
 - Support Load balancing on both inbound and outbound sessions for link availability, WAN utilization, and user-defined priority.

Executive Summary

Region of Customers:

Asia Pacific

Industry:

Carrier, Service Provider, Internet Service Provider (ISP)

Business Challenge:

With the rapid growth Internet network, the WAN of network reliability and stability guarantee, become a great challenge to any service providers. At the same time, the unmanaged device for any large network deployment may cause high administration effort, and maintenance cost.

Solution:

The Cell Managed Janus solution can be deployed at the network infrastructure to provide a robust network access between the network providers and the host. Cell Janus products enable the high-speed bandwidth aggregation with network resiliency, intelligent routing, and traffic optimization to maintain network continuity and manageability.

Business Value:

- Enhance the network service quality in terms of reliability and stability.
- Simple, affordable and reliable all-in-one network service appliance.
- Multi-WAN backup model increase the business continuity & opportunity
- Prevent the confidential information leakage due to misuse of web applications.
- Centralized management & remote monitoring to reduce the administration effort & maintenance cost.



Cell Janus
Multi-WAN Service Gateway



Cell iCMS-Janus
Intelligent Cell Management System

- **Full-function Edge Device**
 - Support firewall with Stateful inspection, DMZ service, DHCP, NAT for extended application support
 - Support SNMP for third-party management, and an integrated PPPoE client for xDSL connections.
- **WAN Health Monitoring**
 - Support a continuous health monitoring on all WAN links of the device
 - Support to check the physical network connections in its active form and indicate the logical network connections out to the remote station.
- **WAN Traffic Management**
 - Provide a network traffic control management (QoS) service to the WAN outgoing and incoming traffic.
- **Device Monitoring**
 - Provide a Web-based GUI to perform comprehensive device configuration.
- **Complete & Remote Monitoring Management**
 - Support 3-tier network architecture for remote device monitoring, configuration and management. It support traffic dashboard to provide all-round monitoring of the WAN traffic status. Janus comes with an embedded SNMP agent and syslog agent providing common management and alert platform for organizations using SNMP/syslog managers.
 - Complete managed Janus service by service providers, NOC or any local network maintenance center.
 - Complete managed by our centralized management platform, Cell NetsVision, iCMS-Janus.
 - Support a simple & user friendly Web-based GUI to perform comprehensive device configuration and operation.

Cell Managed Janus Services :

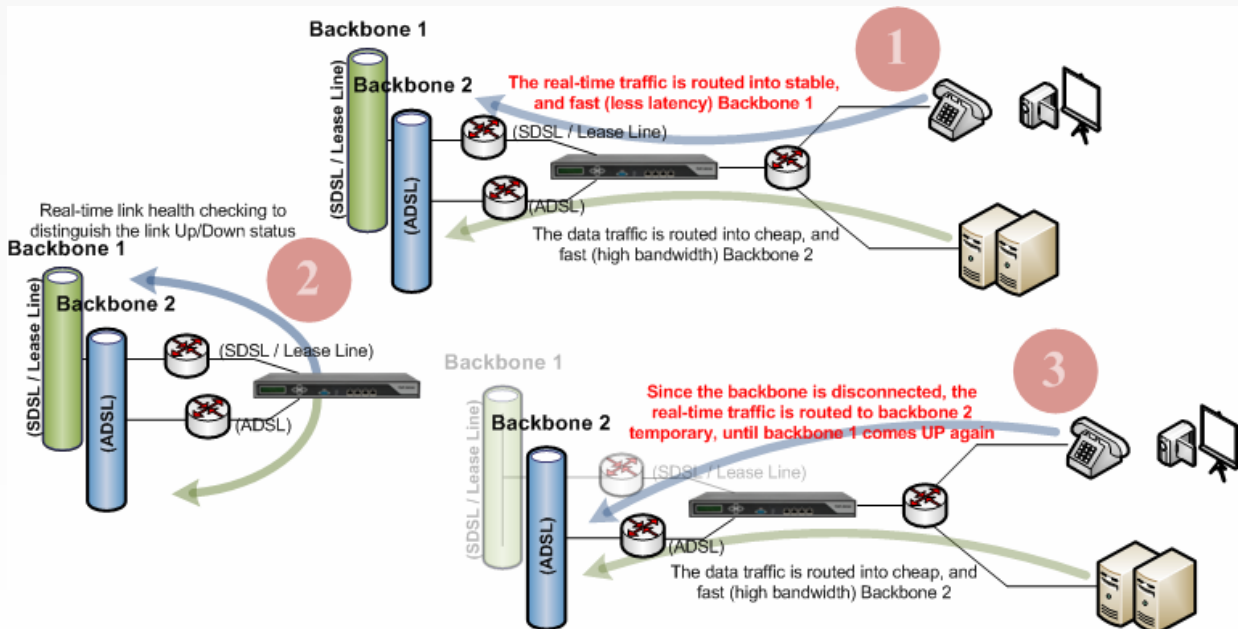
For the managed Janus services, Cell Janus is supported by Cell NetsVision, iCMS-Janus centralized management platform that can provide a complete and comprehensive device configuration features and management services to ensure the network continuity and manageability.

Cell Janus, as a multi-WAN Service Gateway, provides mix-and-match multiple network WAN connections (leased line, Metro-Ethernet, xDSL) to the remote hosts. Carriers and network service providers are able to introduce additional WAN connections to the customer, to increase the overall bandwidth and provide active-active WAN backup. Finally the bandwidth availability and stability of the service is enhanced.

Cell Janus provides an advanced routing and physical DMZ, carriers and network service providers can take advantage of these features and fulfill the requirement of the real-time network service for nowadays web applications from the corporate customers. It also support to report the firewall alert, device operation event, and real-time traffic statistic to the centralized management platform. The network administrator can make use of this information to monitor all the operation and overall performance on every device, analysis the customer Internet usage, and improve the problem-solving process.

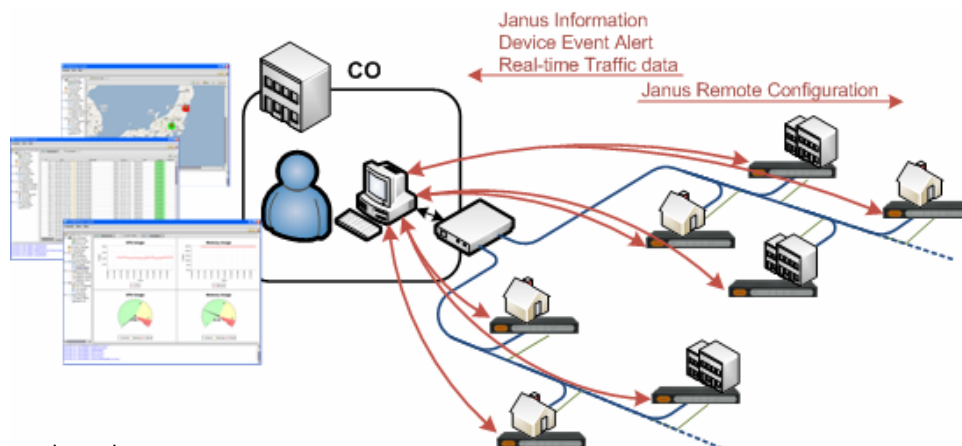
Typical Application

Fulfill the non-stop real-time network traffic usage for web applications.



Cell iCMS-Janus Centralized Management

Cell NetsVision, iCMS, intelligent Cell Management System is a completed & centralized management system for all Cell product portfolios. Cell iCMS-Janus, with embedded and unique Cell iPlugin of Janus, it can support to manage Cell Janus devices remotely and centrally, visualize the device operation status, display the current traffic statistic in form of dashboard, provide the inventory database, and handle the fault (event) management.

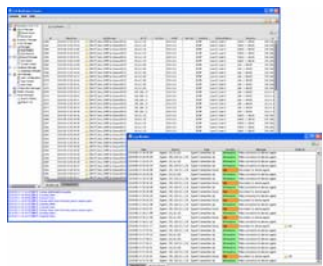


- Visualize the network topology
- Tables the event from devices
- Support Janus Real-time status reporting (Device event list, traffic dashboard, QoS/Firewall report, etc)



Geographical Device Map

Cell iCMS-Janus provides device map to visualize network topology, and physical location with a single view. All the monitored Janus devices have to report the alert event, perform the device status, and notify the present in the map.



Event / Fault Management

Cell iCMS-Janus consolidates and centralizes all the logs, status and events database from the monitored Janus devices over the network. It provides all the analysis and reporting centrally. It also provides the help-desk problem tracking system for managing the problem-reporting, task processing tracking, and problem case knowledge base storage.



Remote Device Management

Cell iCMS-Janus provides remote monitoring and device configuration of the monitored Janus. It supports to drill-down to each device for configuration and connection of the traffic information across the Janus. It provides operation dashboard, traffic dashboard, and real-time status statistic.

Key Benefits to Customer

- **Improve Network Reliability and Stability**

Cell Janus provides multiple WAN connections back up and aggregation services to the customer hosts to prevent any single point of failure. The WAN health monitoring feature and WAN connection performance statistic can predict the potential network problems.

- **Enable to introduce higher-bandwidth and real-time services**

Cell Janus provides multi-WAN service in the edge of the customer side. Carrier or network service provider is able to introduce additional new WAN connections to the customer and gain the business opportunity. For the multi-WAN load balancing, Cell Janus increases the overall bandwidth and WAN continuity to achieve real-time applications such as VoIP and video streaming demanded by corporate customers.

- **Simplify Network Management**

Cell managed Janus solution provides a centralize device management, inventory records, centralize fault management of all the Janus devices from remote sites over the Internet network. It can reduce the administration effort, converged the management power, and lower the maintenance cost.

- **Enhance Problem Solving Process by Centralized Management**

Cell iCMS-Janus management platform provides a complete set of network monitoring and managing system for network administrator to monitor traffic usage & condition on every WAN connection in the network infrastructure, the potential faults and performance limitation problems. The embedded the help-desk problem tracking system is used to perform the problem reporting, fault analyzing & diagnosis. The problem solving process is enhanced.

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.