



PipePlus®

Is your Network at Risk by Relying on One Internet Link?

Recent news stories have brought attention to an alarming increase in the number of organisations relying on a single internet connection. Internet link failures can have a massive impact on all aspects of your organisation and ultimately put your organisation at serious risk.

PipePlus® - Link Aggregation & Failover Technology

Any CyberHound Solution can be upgraded seamlessly to include PipePlus® within the same appliance – the only consideration is network ports that can be added easily with a managed switch or an additional network card for the iSeries Solutions.

CyberHound's unique technology allows you to aggregate up to 16 separate internet services from multiple ISPs to offer your organisation a low cost and seamless failover technology in the event of a link failure. No ISP support is required to make this work for your organisation. This technology also supports any internet connection including 3G/4G services with a network interface.

The solution also enables multiple internet pipes to be load balanced to create one virtual pipe. This provides organisations with practically unlimited bandwidth at a fraction of the price of a single high speed pipe. This translates into highly economical, high performance solutions for organisations of all sizes. This also gives the ability to set link "weights", prioritising faster connections.

PipePlus® is the only service of its kind that is available with the full suite of security and management tools on a single appliance. You no longer need to worry about multiple solutions, support contracts and interoperability.

PipePlus® enables multiple internet links to be aggregated to provide greater bandwidth and failover for your network.



High Availability Internet Access

Provides business continuity and high performance internet access solutions for organisations with multiple internet connections providing greater throughput and high availability.

PipePlus® has been engineered in such a way that it is horizontally scalable with no limitations on the number of WAN (ISP) links.

Seamless Failover Technology

Failover links are collections of internet links, set up in such a way that if a link is disconnected and fails to reconnect, the next link will be tried instead. For instance, if the fibre link fails, then a DSL link can be automatically activated to provide continuity of service.

3G/4G Support

PipePlus® offers support for 3G/4G Network internet connections. The ultimate cost effective solution for organisations to provide redundancy to their networks. Support is available for any 3G/4G connection with an Ethernet interface.

Organisation Continuity & Inexpensive Bandwidth Upgrades

PipePlus® is one of CyberHound's flagship solutions, providing a host of features relevant for all segments of the market. The technology enables multiple arbitrary internet pipes to be load balanced, providing organisations with practically unlimited bandwidth at a fraction of the cost of a single organisation grade pipe. This translates into highly economical and high performance internet connectivity solutions for organisation of all sizes. Effective use of bandwidth is managed by "weighting" an individual link with a ratio. This controls the amount of traffic an individual pipe will receive.

In addition, the technology provides organisation continuity for organisations that rely heavily on internet connectivity by offering fully automated failover from one internet provider to



PipePlus®

another without any user intervention. This is a key differentiator in that the automated fail over and fail back of links requires zero administrative overhead. Once policies have been set during the initial configuration of the links there is no ongoing management in terms of failing over failed links or reverting back to links that have been restored. This allows for peace of mind such that the CyberHound Solution will manage and route traffic in an expected manner.

CyberHound PipePlus® supports up to 16 active internet links. Our high end physical platforms can scale to 10 onboard NICs, allowing for 9 internet connections and a NIC reserved for Local Area Network access. Additional connections can also be run via a single NIC utilising a switch.

Total Flexibility

Active/Active

This configuration provides increased bandwidth into a site for a fraction of the cost of a single large 'fat' pipe. All pipes are active and are configured with a "weighted" ratio to determine how much outbound traffic is pushed through a particular pipe. If a

pipe fails it is removed from the active pool and all traffic is transparently routed over the remaining active links. When the pipe is restored it is added back into the active pool and again "weighted" load balancing will occur through that link.

Active/Passive

Active/Passive implementations are the ideal deployment choice for those with organisation continuity in mind without the need for increased bandwidth. In this case any number of links can be configured in an active/active mode for "weighted" load balancing. When all of the links in the active pool fail the passive link is then brought up as a last resort. The passive link could even be a 3G/4G device. This provides a fall-back position if all internet links are cut and can also be cost effective for regional offices.

Inbound traffic can also be load balanced using our own dynamic DNS server which only publishes active link addresses. Hence if a link fails, DNS resolution will only resolve to the active link(s) providing automated resilience for inbound traffic. This negates the need for expensive protocols such as BGP to be used.

