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### ***SwiftCache Reverse Proxy***

SwiftCache is Conversant's high performance media caching appliance. In May 2011 we will be launching v2.3 that includes Reverse Proxy capability.

Reverse Proxy is a new mode of operation supported by SwiftCache that allows it to offload traffic from web infrastructure. The Reverse Proxy allows SwiftCache to be deployed in front of the web origin servers to protect them from direct end user requests.

This enables the web infrastructure to seamlessly handle very large traffic and request volumes without any degradation in performance. It also provides a measure of protection against DoS and other forms of attack by enabling malicious requests to be filtered and logged.



### ***Scale Infrastructure*** >

Scaling web infrastructure to cope with peak demands is a complicated challenge. Most large websites can be architected to provide a layer of scalability by abstracting the web tier from the database tier. However even with this logical abstraction scaling the infrastructure to cope with thousands of requests per second remains a considerable challenge that can prove extremely costly especially for sites where a Content Management System generates the content.

SwiftCache is designed to be deployed transparently in front of an existing web infrastructure with zero changes to the existing website. SwiftCache enables customers to avoid expensive and time consuming development charges in order to improve the scalability and performance of an existing site.

In Reverse Proxy mode the SwiftCache will offload the serving of "static" content from the core web infrastructure. This means that any content that is not personalized or dynamic will be served from the SwiftCache. SwiftCache supports all types of web (HTTP) content from AJAX Web2.0 sites with extensive interactivity to media rich sites with heavy use of images, videos and Flash applications.

On most websites over 90% of the traffic is generated from static content, which can be offloaded to the SwiftCache. This allows the core web infrastructure to be dedicated to serving the dynamic, personalised content which overall allows a better web experience to be delivered quickly and cost effectively.

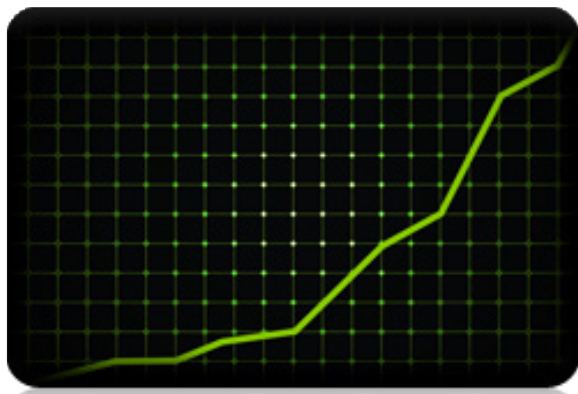
## Protect Website >

SwiftCache also provides the ability to filter requests. This is particularly useful to prevent the web infrastructure from unauthorized or undesirable traffic. The SwiftCache allows each request that is received to be inspected and blocked if it is deemed to be unsuitable.

For example many sites have an Administrative interface that should not be publicly accessible. SwiftCache can restrict access to this interface to a list of authorized IP addresses and seamlessly block or redirect any unauthorized users.

Additionally many APIs are vulnerable to attack unless appropriate security mechanisms are put in place. SwiftCache can be used to perform basic validation of requests to prevent DOS and other forms of attack. For example the SwiftCache can block malformed HTTP REST API requests that utilise the incorrect HTTP method or where the correct parameters are not present.

These features of SwiftCache ensure that the web infrastructure is able to offer high levels of availability and to provide a measure of protection against malicious traffic.



## Improve Performance >

Most modern websites generate web content from a database. This allows them to update content frequently and to personalize and customize the content for the end user. Whether the website is a driven by simple blogging software or a high powered content management system (CMS) the database can often become the performance bottleneck as the site grows in popularity.

Relatively complex pages can cause between 50 and 100 database operations just to build a single page for a single request. This can cause several seconds of latency just to build the web page before it is returned to the end user.

When a site is handling less than 10 requests per second it is possible to optimize the software to cope with this level of traffic. However as the popularity of the site grows it becomes a serious challenge to optimize the software alone. Hence SwiftCache can assist by offloading requests from the database.

By deploying SwiftCache in front of the web infrastructure, the operator is able to offload up to 90% of the requests from the database and to serve those directly from cache. This removes almost all of the latency associated with building the web page. The SwiftCache content freshness capabilities ensure that stored content is revalidated periodically to avoid serving stale content. This provides the most cost effective mechanism to improve the performance of the site without affecting the behaviour.

### SwiftCache Reverse Proxy Feature Note



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