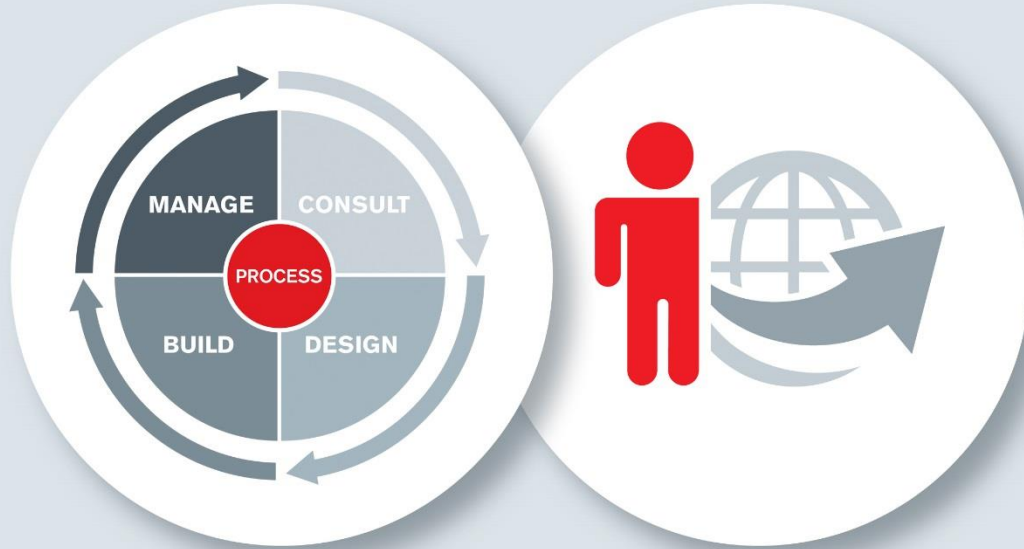


# Claranet Service Description



## Web Acceleration & DoS Protection

Web Acceleration and DoS Protection enhances the security, performance, and availability of an application through the use of multi-national cache nodes and state-of-the-art, intelligent DoS mitigation.

V10.1

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## The Service Description

This Service Description describes the service Claranet provides and details your responsibilities in relation to this Service. The Service Description forms part of the Agreement between the Parties and all terms used within this document are in accordance with the terms to be found in the Master Services Agreement.

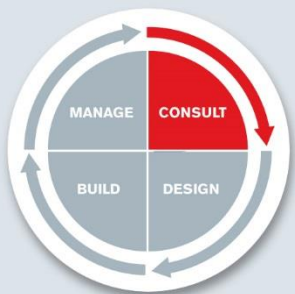
## Service overview

Web Acceleration and DoS Protection uses delivery nodes on the backbone of the Claranet network. Claranet use this functionality to filter or deliver specific traffic at the entry point. By utilising this, Claranet can enhance the security, performance, and availability of an application through the use of international caching nodes and state-of-the-art, intelligent DoS mitigation

This service is only available to you if you have a public-facing web application. This can be served from Claranet data centres, or non-Claranet data centres and requires no hardware or software installation. The service is able to support web applications that use HTTPS/SSL via the TLS and the Server Name Indication (SNI).

You are able to choose from three plans. Each plan provides a set number of domains, outbound traffic, and requests per second which should cover normal day-to-day operations. Outbound traffic is measured at the 95<sup>th</sup> Percentile.

You should discuss your requirements with Claranet's design team so we can ensure you have selected the right plan, and Claranet can configure and maintain your service in accordance with the service level you require. Claranet can monitor all aspects of its function and keep you up to date on the performance levels. This document will take you through the various options available to you and will outline exactly what each party is responsible for in the delivery of the Web Acceleration and DoS Protection service in each of the **Consult** | **Design** | **Build** | **Manage** stages.



# Consult

Claranet's consulting process ensures that you have the all right information, the right recommendations, and the right service options available to you to achieve your business outcomes.

Understanding your business is paramount to ensuring that you have the right solution for your business outcomes. In the Consult stage, Claranet will discuss your business requirements with you prior to recommending a solution. In most cases, the Web Acceleration & DoS Protection service is part of a larger solution involving either the Managed Hosting service or one of the Connectivity services or both. Therefore, the Consult stage for the Web Acceleration & DoS Protection service is not treated independently and will be considered when reviewing the overall service and solution.

Depending on the complexity of requirements, one or more workshops between you and Claranet may be arranged in order to outline your requirements. These may be conducted by Solutions Consultants, Strategy Consultants, Solutions Architects and Enterprise Architects who will be applied at our discretion. It is in everyone's interests to ensure that the proposed solution will meet your requirements and one of our first roles is to focus on your business, your IT requirements and to produce a high level scoping report, the High Level Options Analysis. This will allow you to make an informed choice as to the recommended path.

## High Level Options Analysis

### What Claranet will do

**Time to complete:** The High Level Options Analysis is a consulting based service and is included up to a maximum of 2 days' work at Claranet's discretion. In some instances, the work required to produce a High Level Options Analysis could extend beyond this e.g. where the requirements need extensive discussion or the options are particularly complex. If this is the case, Claranet will agree with you a charge for the additional work required to produce a High Level Options Analysis to establish the requirement.

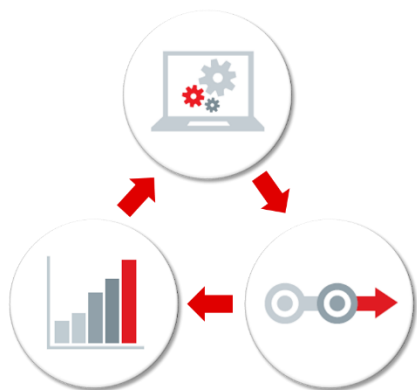
**Technical Design:** Technical work beyond this falls outside of the scope of the High Level Options Analysis and is carried out in the Design phase.

### What you will do

**Information sharing:** Provide any requested information to allow Claranet to deliver a High Level Options Analysis. This will include full details of on-going technical contacts within your organisation. This information will form the basis of the Initial Configuration, so it is your responsibility to ensure the information provided is correct.

## Packaged Consulting

Claranet has a number of pre-packaged assessments and audits that help to outline your readiness in respect of particular IT options. It may be that the completion of one or more of these packaged consultancy engagements is made as a result of the recommendations made in the High Level Options Analysis report. The completion of these assessments follow a general pattern:



#### Current State

Performing a real life assessment of your current environment and understanding where your business needs, and your current technical setup, may diverge.

#### Future State

A vision of the future for your company, taking into account strengths, weaknesses, opportunities and threats.

#### Transformation

The enablement program to be undertaken as a priority to advance your organisation to the desired level of maturity.

### What Claranet will do

#### Assessment options:

- Linux Infrastructure Maturity Assessment (LIMA)
- Infrastructure Maturity Assessment (IMA)
- Cloud Readiness Assessment
- Open Source Assessment

**Pricing:** This additional packaged consulting service is optional and is a chargeable event. Claranet provides three prices for each assessment depending on the size of your company and the complexity of your requirements: Small / Medium / Large.

## Consulting

A packaged consulting approach can be of significant help to many organisations. However, Claranet also provide a specialist consulting service that can be used at any time (including pre-contract) to help you in areas outside of the packaged offering. This engagement is specific to you and can cover any area that is needed with regard to your business and technology.

# Options available

Claranet provides a range of plans within the Web Acceleration & DoS Protection Service. Each plan provides a set amount of websites, traffic, and requests per second. The plans are based on normal day-to-day operations of your web application. The traffic is measured at the 95th Percentile. The plan options can be found in the appendix.

### What Claranet will do

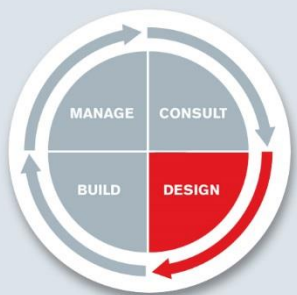
**Features and functionality:** Deliver the Service as described in this document

### What you will do

**Minimum specification:** You will be responsible for defining any minimum specification.

The Service uses a series of methods that work in conjunction with the Claranet network to stop the majority of network and application attacks before they impact your Service.

Claranet ensure the Service can operate at a very high capacity through the use of multiple high-bandwidth nodes, which are distributed across multiple international data centres. By doing so, this allows Claranet to be able to interact with the traffic from the IP layer through to the application layer.



# Design

The Claranet Web Acceleration and DoS Protection Service can be tailored to your specific web application to ensure it performs to the best of its ability

In the **Design** section, Claranet will ask you to complete a Technical Survey. For the Service to be at its most effective it must be designed specifically for your web application. If you manage the web application you will be required to fill in a questionnaire about your web application during the order process, as well as potentially having a detailed conversation with a Claranet engineer. If Claranet manage your application then Claranet will already have a working understanding of it and the setup will require less contribution from you. Additional support details can be found in the **Evolve** section.

## The Technical Survey

A Technical Survey is required to be completed by you for the initial set up and for each additional Site thereafter. If the Technical Survey is either not provided by you or the information contained within is not correct the service will not perform to the best of its ability and may not provide you with the performance or security enhancements advertised. It is your responsibility to fill in and return the Technical Survey to Claranet. A Technical Survey is required to be completed by you for the initial set up and for each additional site thereafter.

### What Claranet will do

**Technical Survey:** Send you a Technical Survey to complete

**Default configuration:** Implement a default configuration policy to your web application if the Technical Survey is not completed.

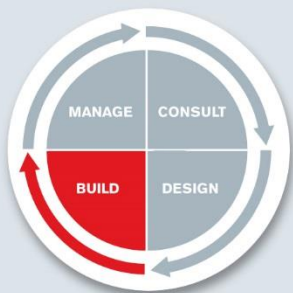
**Order completion:** Commence the **Build** phase of the service once your signed order is received.

**Design:** Once the order is signed an Implementation Engineer will contact you to discuss the details of your application.

### What you will do

**Minimum specification:** Ensure that any specification requirements are clearly and accurately completed in the Technical Survey as soon as possible.

**Policy Options:** Ensure that the technical survey options are suitable for your web application



# Build

Once your service has been designed, our Service Delivery team take over to manage the implementation and delivery process, working alongside your internal teams.

The **Build** section covers the steps involving the configuration and installation according to the agreed specifications. At the completion of this phase, the Service is fully tested. Once accepted, any future changes will be managed as part of In-Life Management, details of which can be found in the **Manage** section.



## What Claranet will do

**Order completion:** Commence the **Build** section of the Web Acceleration and DoS Protection Service once your signed order is received.

## Installation

### Configuration

Claranet will contact you after the order is signed to discuss the specific requirements of your application and technical survey.

Claranet Web Acceleration and DoS Protection provides HTTPS services through the TLS standards. The solution supports the common and high standard SSL certificate sizes. Multiple intermediate and wildcard certificates are supported, as well as SAN (Subject Alternative Names) certificates.

The SSL implementation supports Transport Layer Security (TLS) 1.0, TLS1.1, TLS1.2 only. The deprecated standards SSL 1.X, SSL 2.X, SSL 3.X are not supported anymore, because of a potential risk involved. SSL services are delivered on the shared IPv4 and IPv6 services.

The SSL is delivered via SNI (Server Name Indication). SNI is a TLS extension which allows Claranet to read the website common name at the SSL session negotiation level, and deliver SSL services using multiple certificates on a single IP. SNI requires both the Client and the server to support it. The majority of modern SSL clients support SSL via SNI, however, certain combinations are not supported. The combinations can be found in the appendices.

Claranet also support communication to the backend via SSL encryption allowing end-to-end encryption of the network communication. This can be configured with varying levels of certificate validation based on your specific requirements.



## What Claranet will do

**Configure the SSL:** Configure the service according to the specification you have requested in the Technical Survey using the SSL key provided by you.



## What you will do

**SSL keys:** Provide and configure the SSL Keys

## Initial Build steps

Once the signed order has been received, Claranet's Project Office will contact you to inform you of the next steps including being assigned a Project Owner and an engineer. The engineer will be responsible for configuring the Web Acceleration and DoS Protection Service in accordance to the information you have completed in the Technical Survey.



### What Claranet will do

**Support times:** Provide support between 09:00am to 17:30pm weekdays, excluding Bank Holidays. Your primary contact at this stage is your Project Owner within the Project office.

**Engineer support:** Assign you an engineer by the Project Office who will liaise with you regarding your configuration.

## Testing and acceptance

### Testing

The engineer configuring your service will ensure that the testing process is as transparent as possible. If actions are identified as part of this process they will be included in your delivery plan and managed to closure by your Project Owner.

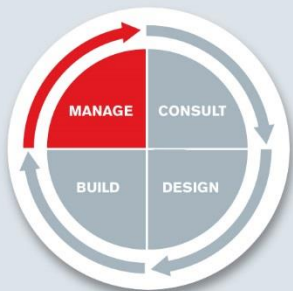


### What Claranet will do

**Testing:** Test the service to ensure that it performs as intended and in accordance with the Service Level Agreement.

### Acceptance procedure and Handover Document

Once the service is set up, the ongoing management is under the process of the In-Life Management process managed by our Service Operations Team. As part of the acceptance procedure, you will be provided with a Handover Document, a copy can be downloaded below. This contains details of how to make the most of the support facilities and who to contact in case of a query or fault.



# Manage

Your business is managed by our Service Operations team who provide a pro-active, ITIL aligned, service. The Manage stage of the process covers the In-Life Management including reporting and monitoring

## In-Life Management

Once the service is up and running, Claranet will manage changes to the service 24x7x365 in order to maintain its operation. The parameters of the ongoing management of the service and the appropriate roles and responsibilities are outlined in the areas below.

### Access to the administration portal

Access to the management interface is carried out securely by Claranet. Claranet retains all administration rights to Web Acceleration and DoS Protection.

### Planned changes and emergency maintenance

Claranet will contact you with regard to any planned maintenance. During regular day-to-day operations Claranet will not change the configuration of your web application to improve acceleration and cache performance, and therefore will not alter the configuration of the Service without your request beforehand. Claranet will not manage your web application above and beyond any outstanding agreements you have made with Claranet.

If your application is the victim of a Denial of Service Claranet may adjust your configuration to mitigate the attack.



### What Claranet will do

**Notice:** Provide at least five working days' notice of any planned maintenance work or supplier planned engineering works (PEW) wherever possible.

**Notification:** Notify the nominated contacts you have provided and this is through two primary channels, the online portal and email notification. An email is sent to the nominated contact and details are announced through the online portal. The notification will contain the date and time of the maintenance, the reason, the service affected and the likely impact to you.

**Problems occurring during planned maintenance:** Invoke its Major Incident process should a problem occur during the planned maintenance window.

**Emergency maintenance:** Provide as much notice as possible and we will seek to ensure minimal disruption. Wherever possible, changes will be made at periods of low service utilisation



### What you will do

**Contact list:** You will be responsible for providing and maintaining the contact details including the levels of authorisation that any individuals may have. Claranet will only provide any reporting information and change requests, to those personnel in accordance with this information.



## Help and support

### Service Desk support



#### What Claranet will do

**Support times and Service Desk:** Provide support between 24x7x365 once the Managed Service has been handed over to you. Full details of how you can make the most of this service will be provided in your Handover Document.

**Raising tickets:** Changes to your configuration can be requested through the Claranet Online ticket system and details of this can be found in the **Appendix: Help and Support**.

**Escalation:** In the event that an escalation is required, Claranet provides a clear escalation process to allow you to contact the appropriate person within the company. Details of this can be found in the **Appendix: Help and Support**.

## Service Levels

The Service Level determines the parameters by which the service is accountable. Details of this can be found in **Appendix: Service Levels**.



# Appendices

Here you will find further information regarding the technical specifications of the service as well as standard procedures and agreements.

## Technical Options

### Unsupported technical options

*Table: Unsupported SSL combinations*

#### Unsupported SSL Combinations

WebClient service (for WebDAV) included in any Windows version

Internet Explorer 6 or earlier and any IE version on Windows XP or earlier

Safari on Windows XP or earlier

BlackBerry OS 7.1 or earlier

Windows Mobile up to 6.5

Android default browser on Android 2.x (Fixed in Honeycomb for tablets and Ice Cream

wget before 1.14

Nokia Browser for Symbian at least on Series60

## Plans

	Plan 1	Plan 2	Plan 3
Outbound traffic bandwidth (95 <sup>th</sup> percentile per month)	25 Mbps	50 Mbps	100 Mbps
Maximum requests per second	100	500	2,000
Web sites included	5	10	20

## Help and Support

### Change Control Process

Claranet's Change Management team are responsible for requests relating to any product and service configuration changes that you wish to make. The team specialises in configuration changes and follows strict processes ensuring that the changes are authorised. The Change Management team are also responsible for Claranet's Change Advisory Board (CAB), which discusses and approves changes raised internally. To make a change request, see the section below on "Raising a support ticket"

## Raising a support ticket and a Request For Change (RFC)

Claranet provides two ways for your approved contacts to raise, track and update standard support tickets; through Claranet Online and by telephone. For security and audit reasons, you are required to make all requests for change through the customer portal and only portal users with the correct privileges can request a change. You will only see your services listed so please select the service relating to the request for change. In the event that the customer portal is unavailable, please contact Claranet by telephone, where an emergency procedure will be in place to log change requests on your behalf. Request for changes will not be accepted through this number at any other time.



### What Claranet will do

**Through Claranet Online:** Support tickets raised through Claranet Online are assigned to the appropriate support team based on the service you need the support for. You will only see your services listed so please select the service relating to the incident or to the service request. The response time will start from as soon as your ticket has been submitted.

**By telephone:** It is not always convenient to raise support tickets through the portal and therefore you may choose to use the telephone instead. When choosing to raise a support ticket using the telephone you must provide proof of identity following Claranet's standard security procedure. The response time will start from as soon as your telephone call has ended.

## Escalating a ticket

In the event that you need to escalate a ticket, Claranet is ready and available to help you quickly bring your issue to closure. Within each level of the escalation path the person you speak with is responsible for evaluating your situation, facilitating the resolution plan and acting as your sponsor. The benefits of the escalation procedure are:

- ITIL accredited staff owning your escalation
- A focus on service recovery
- Improved communication
- Consistent process

An escalation may be initiated when, after working through our standard support processes and with our teams, you are not satisfied with the level or timeliness of the service you have received. Additionally, an escalation should be initiated when there is tangible impact to your production environment, or there is high risk to your business operations.



### What Claranet will do

**Escalation Manager:** Assign an Escalation Manager who will deal with your escalation and collaborate with you to develop a communication plan. A technical plan of action may be needed to ensure resolution of a technical issue. Your Escalation Manager works as your advocate internally and will become a virtual member of your own problem resolution team. Should you feel dissatisfied with the escalation process, please contact your Account Manager directly.

## Service Delivery – Fix levels and response times

The circumstances where a fix service level is deemed to be met are:

- Where you receive a telephone call (within the service level response time) resulting in a fix over the telephone;
- Where you receive a telephone call and you defer the visit of an engineer to a specific time, the fix time is measured from the specific time you specify;
- When a part which can be fitted by you arrives on site;
- Where it is subsequently discovered that the issue giving rise to the telephone call falls outside the Services agreed to be provided by Claranet;
- When the equipment has been returned to an acceptable operational status or an item of loan equipment has been supplied; and
- Where the fault relates to an excepted Service.

Table: Service Level Response Times

Priority	Service Level Response	Description
<b>1 – Critical</b>	Within 1 hour	Total service is unavailable
<b>2 – Major</b>	Within 2 hours	Partial service, an element of the total service has failed
<b>3 – Minor</b>	Within 4 hours	Impaired service, no element has totally failed but there is a quality issue
<b>4 – Request</b>	Within 1 Business Day	The service is unaffected. Request for product related technical advice or configuration change
<b>5 – Question</b>	Within 2 Business Days	General information and feature questions related to the Service

## Service Levels

If Claranet fails to deliver the stated service level, Claranet agrees that you shall be entitled to receive, in lieu of all other remedies available to you, Service Credits as set forth in this section against the fees owing to Claranet under the Agreement.

In the event that you and Claranet agree that Claranet has failed to meet any service level guarantee during any given calendar month, Claranet will credit your account with a Service Credit. Service Credits shall apply only to the fee(s) for the affected service(s). Service Credits shall be deducted from the relevant monthly fee due in respect of the second month following the month in which an agreed Service Credit is claimed. The maximum amount of Service Credit you can receive in each calendar month relating to this agreement is fixed to 50% of the fee for the affected Service. The Service Credits issued are liquidated damages and, unless otherwise provided in this agreement, such Service

Credits will constitute your sole and exclusive remedy with respect to the failure for which they are payable.

### Compensation claims

Compensation claims must be submitted, in writing (email or letter), within 30 days from the service level guarantee breach to which they refer. All claims must be submitted to the appointed Account Manager and/or Service Manager. You agree to correct problems and to attempt to minimise the recurrence of problems for which you are responsible that may prevent Claranet from meeting the service level guarantees. Requests for support received by the Service Desk by means other than telephone or request ticket (for example, by fax) will be excluded when calculating service levels.

### Exceptions

Claranet excludes responsibility for meeting any service levels to the extent that meeting the service levels is affected by the following items:

- if you are in default under the Agreement;
- in respect of any non-availability which results during any periods of scheduled maintenance or emergency maintenance;
- in the event that the Service is unavailable due to changes initiated by you whether implemented by you or Claranet on behalf of a customer;
- in the event that the Service is unavailable due to the your failure to adhere to Claranet’s implementation, support processes and procedures;
- in the event that the Service is unavailable due to the acts or omissions of you, your employees, agents, third party contractors or vendors or anyone gaining access to Claranet’s network, control panel; or to your website at the request of a customer;
- in the event that the Service is unavailable due a Force Majeure Event;
- in the event that the Service is unavailable due to any violations of Claranet’s Acceptable Use Policy;
- in the event that the Service is unavailable due to any event or situation not wholly within the control of Claranet;

- in the event that the Service is unavailable due to your negligence or wilful misconduct of you or others authorised by you to use the Services provided by Claranet;
- in the event that the Service is unavailable due to any failure of any component for which Claranet is not responsible, including but not limited to electrical power sources, networking equipment, computer hardware, computer software or website content provided or managed by you;
- in the event that the Service is unavailable due to any failure local access facilities provided by you; and
- in the event that the Service is unavailable due to any failures that cannot be corrected because the you are inaccessible or because Claranet personnel are unable to access your relevant sites. It is your responsibility to ensure that technical contact details are kept up to date by submitting a request ticket to confirm or update the existing the technical contact details