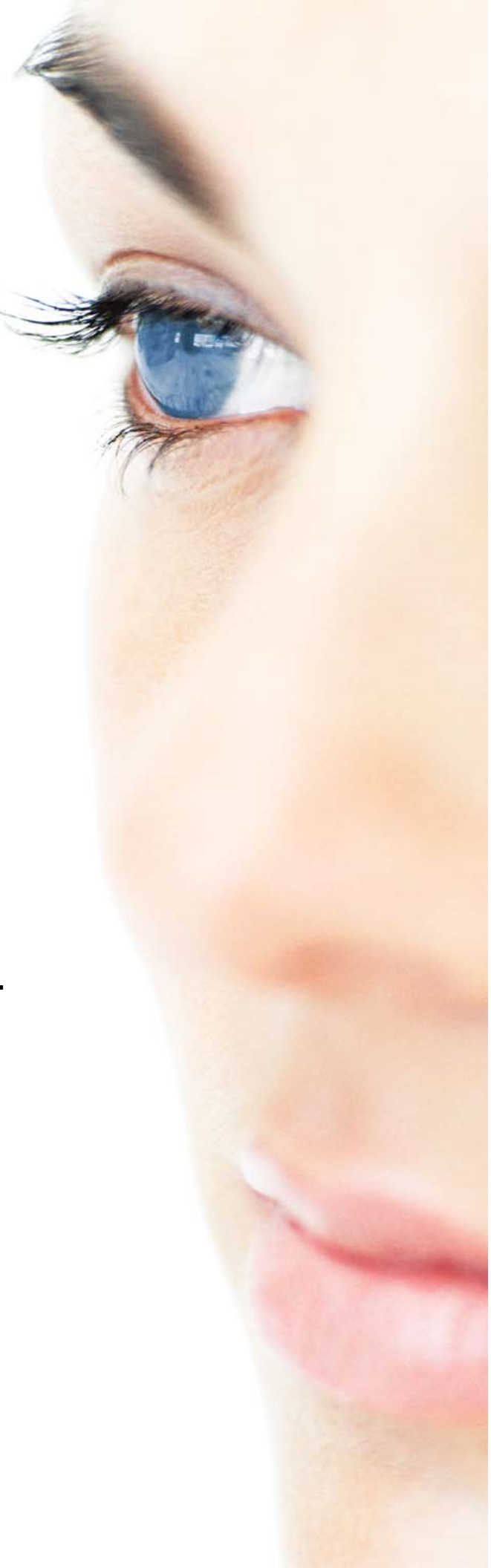

LANnet - Unmanaged ADSL Service Definition

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inTechnology

LANnet Unmanaged ADSL Service Definition

Service Overview

The InTechnology LANnet Unmanaged ADSL Service represents one of the connectivity options within the InTechnology LANnet Service portfolio. It provides a low-cost 'wires only' service directly to the users. It is a basic broadband service for businesses wishing to select, configure, deploy & manage their own customer premises equipment (CPE). This Service includes access from the 'spoke' sites into the 'core' network but a managed connection is required to deliver traffic into the Customer's head office, corporate data centre and/or hosting centre (if required). The Service can only be deployed in larger quantities and the minimum order is currently 20 connections.

Service Description

InTechnology LANnet Unmanaged ADSL is a scalable product that can be used to deliver either:

- Internet access or
- Traditional corporate (MPLS) VPN access service

The LANnet Unmanaged ADSL service uses a cost effective, shared, contended infrastructure to transport data from customer sites to the InTechnology core. The service requires a BT telephone line; if this does not exist, a new line can be supplied by InTechnology. The basic charge of the Service does not include the telephone line.

See Table 1 below for details of line speed connectivity options:

Table 1 - Parameters for InTechnology LANnet Unmanaged ADSL Service

Service	Upstream Speed	Downstream Speed
Unmanaged ADSL 500 premium	Adaptive between 64-250Kbits	500Kbits
Unmanaged ADSL 1000 premium	250Kbits	1Mbits
Unmanaged ADSL 2000 premium	250Kbits	2Mbits
Unmanaged ADSL Max premium	Adaptive between 64-832Kbits*	Adaptive between 288Kbits -8Mbits*
Unmanaged ADSL 2+ premium	Adaptive upto 1024Kbps*	Adaptive upto 24Mbps*
Unmanaged ADSL 500 Standard	Adaptive between 64-250Kbits	500Kbits
Unmanaged ADSL 1000 Standard	250Kbits	1Mbits
Unmanaged ADSL 2000 Standard	250Kbits	2Mbits
Unmanaged ADSL Max Standard	Adaptive between 64-448Kbits*	Adaptive between 288Kbits-8Mbits*
Unmanaged ADSL 2+ Standard	Adaptive upto 1024Kbps*	Adaptive upto 24Mbps*

* For rate-adaptive options, the actual speed of the line will depend upon several factors including the noise conditions, the condition of the line and the distance from the serving exchange.

Actual data throughput at any point in time depends on a number of factors including the line speed chosen and the level of collective use of the underlying shared network.

InTechnology can not commit to deliver specific data transfer rates on any ADSL line.

The InTechnology LANnet Unmanaged ADSL Premium options use our supplier's higher grade service and this increases throughput during periods of high network utilisation; this makes the service robust during periods of high network demand.

The InTechnology LANnet Unmanaged ADSL Standard Service is ideal where cost is paramount and a lower throughput during busy periods can be tolerated.

Service Design

Customer data is carried over the BT telephone access circuit, then through the ADSL infrastructure and on to the InTechnology resilient core platform. User connections are authenticated on the InTechnology resilient authentication servers and the data tunnels are delivered to the appropriate VPN(s); typically these would be either the Internet or the customer's private VPN. The service includes the access circuit, throughput across the shared ADSL infrastructure, L2TP tunnel termination and session authentication components.

Dynamic Line Management (DLM)

Dynamic line management operates on the ADSL rate-adaptive services only. DLM effectively enables the tuning of lines performance to maximize performance and stability. Historical performance data will be gathered periodically from the lines and this will be used to identify those lines which are performing badly. These lines will then be re-configured automatically (if possible) to give an improvement in their overall ADSL performance and stability. This re-configuration will result in a short break (typically 20 seconds) in the end user service.

It is possible that re-configuration of a line could occur daily until a stable configuration is found although it is expected that the majority of poorly performing lines will only require 1-2 re-configurations before reaching a stable point. The DLM process may result in a decrease in the ADSL line rate, but this will only occur where a line is identified as performing badly at a higher rate. DLM will also use interleaving to fix problem lines, and this will result in an increase in the delay over the connection, which may affect some delay sensitive services. The DLM process may also be applied manually as part of the standard repair process following an end user fault report.

Lead times

The target lead time to provide orders is between 10 and 15 working days and depends on the availability of a line. Actual times may vary depending on customer availability for appointment and any additional infrastructure shown to be required by the line plant survey if a new line is required.

Charging

Charging for this service is based on a connection fee and then on a monthly rental basis and is billed monthly in advance. Charging does not include the provisioning of a new line (if this is required).

Repair Service Levels

InTechnology offer two service repair levels; the standard service charge includes the Standard level of care. InTechnology encourages customers to upgrade to Enhanced care to ensure that connectivity to sites is restored in a timely manner should a fault occur. If the ADSL service is delivered over a customer owned line and the customer chooses to upgrade to Enhanced Care, it is essential that the care level on the telephone line is upgraded too. When InTechnology is the supplier of the line and the customer upgrades to Enhanced care, InTechnology elevates the level of care on both the ADSL service and the underlying phone line. Please see the Service Level Agreement for more details.

- **Standard** – Standard care offers a 48 clock hour clear within InTechnology, but no guaranteed response time, and is supported by a Service Level guarantee. No out of hours engineering visits are scheduled under standard care.

- **Enhanced** –Enhanced care offers a 24 clock hour clear within InTechnology a 3 hour response time, and is supported by an improved Service Level guarantee. Out of hours engineering visits to site may be used to complete a repair if unrestricted access is available. **NB. This is the recommended service option.**

Service Level Agreement

The InTechnology Unmanaged ADSL service is a 'wires-only' delivery, i.e. InTechnology does not monitor or manage the customer premises equipment (CPE). A fault affecting an end user access circuit would need to be reported to InTechnology by a member of staff within the Customer's fault centre. InTechnology will check the configuration of its internal broadband systems and also remotely the systems of the broadband infrastructure supplier. If these systems do not identify a fault, InTechnology will seek authorisation from the customer to arrange for an engineering visit by the broadband infrastructure supplier. If, as a result of an engineering visit, the broadband infrastructure supplier determines that there is no fault on the broadband infrastructure and the broadband infrastructure supplier levies a charge, InTechnology will pass the charge on to the customer and the customer agrees to pay the charge.

The InTechnology LANnet Service SLA relates to the time for service restoration (TSR) should a fault occur.

The TSR is defined as the time period between fault detection and restoration of service. The TSR starts when InTechnology acknowledges the customer's reported fault. The maximum TSR of the service offered is shown in the following table.

Service Level Availability – Time for Service Restoration

Service	Time for Service Restoration
Unmanaged ADSL with standard care	48 clock hour
Unmanaged ADSL with enhanced care	24 clock hour

InTechnology offers two levels of care on ADSL lines; ‘enhanced care’ builds on the ‘standard’ level and offers a reduced TSR (additional charge applies).

ADSL standard care offers a 48-clock hour clear with no guaranteed response time, and is supported by a Service Level guarantee. No out of hours engineering visits are scheduled under ADSL standard care.

ADSL enhanced care (EC) offers a 24-clock hour clear with a 3-hour response time, and is supported by an improved Service Level guarantee. Out of hours engineering visits to site may be used to complete a repair if unrestricted access is available. Unrestricted site access is required to deliver the TSR SLA.

Levels of service for PSTN

It is important that the telephone line over which the ADSL service will be delivered has a similar level of care as the ADSL service it's self. If inTechnology is asked to supply a new line and the ADSL enhanced care option is chosen, the phone-line service level is automatically upgraded.

BT OpenReach provides the PSTN lines that support InTechnology's DSL services. InTechnology mirrors BT's service care levels adopting them as an integral part of the DSL portfolio.

Care Level 1: Provided as minimum repair service for normal PSTN circuits.

This operates during working hours (0800 - 1700 hours Monday to Friday, excluding Public and Bank Holidays). BT aim to respond to a fault report received before 1700 hrs on one working day by the end of the next working day. Where a fault is reported outside normal working hours, the fault will be treated as if it has been reported at the beginning of the next working day. Work will only be carried out during working hours

This is appropriate for the standard level of care on the broadband service

Care Level 3: Provides enhanced repair service for normal PSTN and circuits.

This operates 24 hours per day, 7 days per week including Bank and Public Holidays. BT will respond within 4 hours of receipt of a fault report. If the fault is not cleared during this period BT will advise the Nominated Contact of the progress being made to clear the fault.

This level of care should be applied to PSTN lines over which broadband services with enhanced care are delivered.

Service Credits

InTechnology shall pay the Customer by way of Service Credits, a sum equal to one hour's Service Charge (exclusive of VAT) for each full-completed hour in excess of the TSR based on the following calculation.

Service Credit = (Monthly Service Charge) x Full completed hr(s) in excess of TSR / Number of hours in a month

Customer Premises Equipment (CPE) faults

Customers can opt to purchase service terminating equipment (CPE) from InTechnology as a service 'add-on'. InTechnology will replace hardware that develops a fault (in-line with the manufacturers guarantee) within 12 months from the date of delivery. When a faulty device is returned, InTechnology will aim to dispatch an unconfigured replacement part within 14 days. It is advisable for Customers with large deployed estates to hold spares locally in order to reduce the impact of device failure.

InTechnology designs and supports the best IP solutions for business with a range of applications seamlessly integrating clients' communications needs through the delivery of secure voice, data and mobile solutions.

InTechnology employs 200 people and has data centres in Harrogate, London and Reading.

Head Office

Central House
Beckwith Knowle
Harrogate
HG3 1UG
Tel: 01423 850 000

London Office

17 St Helens Place
Bishopsgate
London
EC3A 6DG
Tel: 0203 040 5000

Reading Office

Commensus House
3 – 5 Worton Drive
Reading
RG2 0TG
Tel: 0870 777 7778

Enquiries: 0800 528 2522
www.intechnology.co.uk

inTechnology