BT Wholesale

Content Connect Service

Internet Service Providers Product Handbook

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<u>Diagrams and Tables</u>

1.   Introduction

1.1   About this Handbook.

This Handbook provides assistance and useful information so that you can work with us to provide the best possible service.

This Handbook explains the services and processes used in delivering the BT Content Connect (CC) service.

1.2   Conventions used in this handbook.

This Handbook is produced for reference for Internet Service Providers interested in taking the Content Connect services from BT.

BE: Best Efforts traffic which is subject to network contention.

CC: Content Connect, a feature of Wholesale Broadband Connect (WBC) and IPstream Connect (IPsC), as described in this Handbook.

CC Premium: Content delivery over BTW's Broadband Network managed as a priority service where the ISP purchases the BT IPstream Connect (IPsC) and/or Wholesale Broadband Connect (WBC) and CC services from BT and sells or provides to the End User or Content Service Provider.

CC Standard: Content delivery over BTW's Broadband network managed on a "Best Efforts" basis, which is subject to network contention. Where the ISP purchases the BT IPstream Connect (IPsC) and/or Wholesale Broadband Connect (WBC) and CC services from BT and sells or provides to the End User or Content Service Provider.

Content: means the data which a Content Service Provider has provided to the Platform for the purpose of supplying content to EUs by Internet Service Providers.

CDN: Content Distribution Network refers to the BTW Content Connect platform capability which allows Content Service Providers to present Content to BT, for the purpose of BT caching the Content on the platform. The Content is then provided - subject to Delivery Service configuration - to BTW ISPs who have a CSP relationship for onward supply to their End Users via the BTW Broadband network.

CDN Integration and User Guide: the CDN Integration & User Guide for the ISP's CSP customers, as may be amended from time to time containing information relating to Content Connect to assist the CSP with setting up and maintaining service. The Content Connect CDN Integration & User Guide is available on request;

CSP: Content Service Provider being the supplier of Content.

ISP: Internet Service Provider

EU: End User this term relates to the final recipient of the Content i.e. the person using the broadband terminating device (i.e. PC or Set Top Box to connect to ISPs).

PF: Premium Forwarding, the traffic marking description used for supporting higher priority traffic for the CC Premium service.

URL: Uniform Resource Locator, Identifies a resource either by location, or a name, or both.

1.3   Version Control

Please ensure you are reviewing the latest version of this document as it is subject to change by BT, the document history is in Section12.

If you do not have the latest version of this document, it can be found on the CC web site at: www.btwholesale.com/wcc

The site is password protected. Please refer to the next section for access.

1.4   Further Information

If you are not already a customer of BT Wholesale services, you will need to register as a customer and gain access to www.btwholesale.com/

If you are an existing customer of BT, you can find more information about the Content Connect service at www.btwholesale.com/wcc

Details of how to gain access to btwholesale.com can be found in Appendix 1. Your Account Manager or Customer Relationship Manager can also assist you.

The Content Services portal is the main area where information can be found this will require additional access and is detailed in Appendix 2.

A copy of the Content Connect Terms and Conditions (T&C's) are available on www.btwholesale.com/ and are incorporated in the IPSC and WBC T&C's.

If there is any difference between the CC T&C's and this Handbook, the CC T&C's take precedence.

You can find further technical information on CC via Suppliers Information Notes – WBC SIN 472 and IPSC SIN 482 at www.sinet.bt.com

2.   BT and Internet Service Providers Relationship

2.1   BT's Responsibilities to You

We will:

- Assign a BT Support Team to assist in the implementation of the "Service Establishment Process"; and

- Inform you of scheduled maintenance otherwise known as Planned Engineering Works (PEW) via a Nominated Contact that you notify to BT

2.2   Internet Service Providers Responsibilities to BT

You have responsibilities to BT. They include:

- The ISP must register their company on btwholesale.com; and

- Have purchased a Broadband service from BTW that uses the Point to Point Protocol Termination and Aggregation mode (PTA) before submitting an order for Content Connect;

Please note: upon receiving the CRF, a check will be made and the order will be rejected if the above are not in place.

- Reviewing the technical documentation with your Account Manager and our Technical support prior to submitting the CC CRF;

- Providing technical support and engaging in such testing with BT as is required during the service establishment process i.e. per node provision testing and including onboarding of your CSP customers;

- Working with BT to detail any performance issues that arise;

- Nominating a 24 hour contact number and details;

- Telling us of any change to your details or circumstances;

- Ensuring you have adequate product knowledge and technical capability to be able to support the CC Services supplied;

- Following the CC test / assurance processes when reporting faults to BT as set out in section 5;

- Providing details of Nominated Contacts via the CRF to be the point of contact with BT for the notification of all faults in relation to CC;

- Supply the IP address blocks so that Content can be redirected via the BT CDN for the Standard and Premium services. The ISP will be responsible for CSP engagement and ensuring the CSP uses the IP address blocks provided.

- The ISP will be responsible for EU engagement, as detailed in the WBC and ISPC product handbooks ;

- ISPs should regularly check to ensure their Major Service Outage (MSO) and PEW contacts are updated. This can be completed via the MyAdmin option on the BTW.com portal. Appendix 2 explains the BTW.com portal; and

- Informing EUs and CSP customers that their service will be impacted if any limitation or fault is already on or occurs to the underlying Broadband service.

- Provide the following volume forecasts on a 3 month rolling basis to assist BT with capacity planning.

    - Bandwidth usage
    - Storage usage
    - Media type;
    - Protocol; and
    - Codec being used

- Ensure that an Origin Server capability has been provided. This can either be provided via CSP customer or ordered from BT as a service option;

- If the Origin Server is being supplied by BT, a total amount of server space you require in GB needs to be submitted per CSP customer.

- Confirm that your CSP customer's Content client supports Application Level Redirection. For further information, please refer to CDN Integration and User Guide.

3.   Content Connect Services

3.1   Content Connect Standard

CC Standard is a service supplied by BT to ISPs that enables ISPs to provide the CSPs Content to EUs from the CC caches.

Once the ISP has ordered the CC Standard service, the BTW CDN will be configured to deliver Content to that ISPs EU address ranges.

Content Connect Standard Diagram
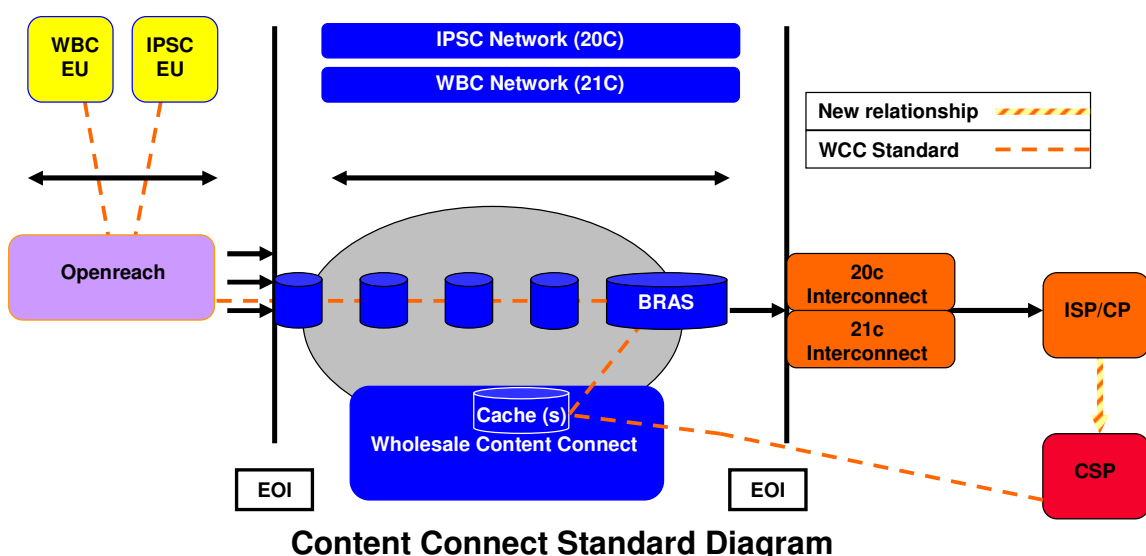
3.2   Content Connect Premium

CC Premium is a service supplied by BT to ISPs that offers the added benefit of prioritisation both within the BT Wholesale broadband network and across each EUs individual local access circuit into their home.

Content allocated to a CC Premium service will be sent to the EU with marked packets known as Premium Forwarding (PF).

PF traffic is prioritised at the BRAS, within the Broadband network, above that of BE traffic. This offers CC Premium customers a quality of service within the network to ensure Content arrives to the EU with lower latency, jitter and loss than via the CC Standard service.

Prioritised queuing at the BRAS protects premium traffic from congestion both in the core of the network, and in the local loop. This protects premium traffic from being disrupted by network congestion encountered by BE traffic. It also enables householders to ensure that the premium Content they view is not interrupted by other users of the broadband service available in their home. Other higher priority services may take precedence over Content Connect in the home.
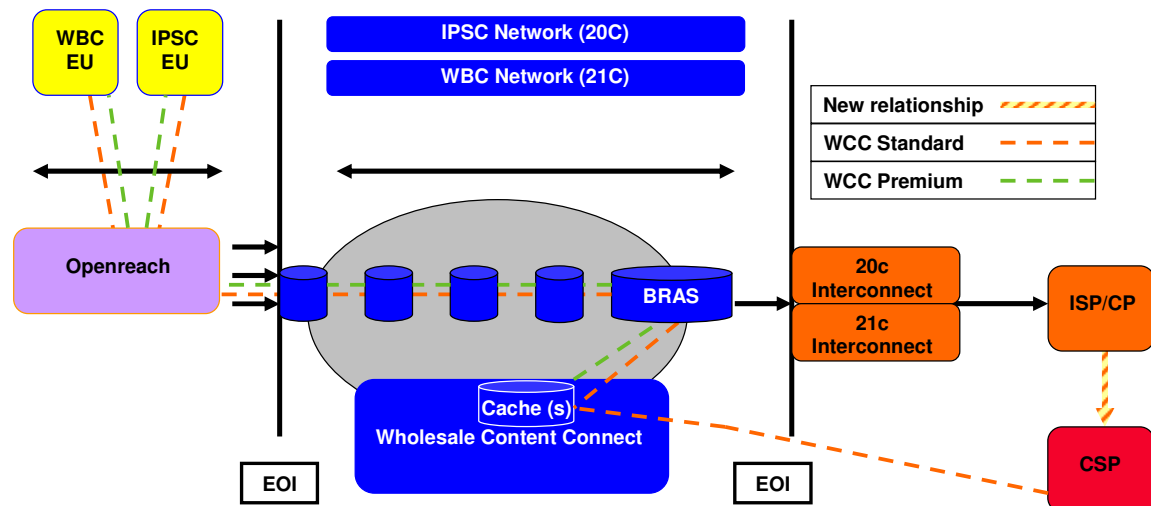
Content Connect Premium Diagram

3.3   Content Connect Origin Server

Where your CSP customer does not have its own Origin Server you can order a BT supplied Origin Server capability. For further information, please refer to CDN Integration and User Guide.

4.   Content Connect Service Ordering and Support

4.1   Becoming a BTW Customer

The relevant BT representative will be able to discuss all order requirements with you. When ready, they will gather all the details of the CC services that you wish to take. They are also responsible for providing all product, commercial and service establishment details. How to become a BTW Customer is detailed in appendix 1.

4.2   Taking the Content Connect Service

The tasks below are a check list of what needs to happen in order for the ISP to take the CC Service. Details to support these tasks are set out in appendix 1 or are tasks that the Account Manager will complete on your behalf.

Have a contractual relationship with a Content Service Provider to provide you with content	Customer
Be registered as a BT Wholesale Customer via www.btwholesale.com. Please keep the above information safe as it will be required for CRF completion	Customer
Gain access to www.btwholesale.com	Customer
Have a Broadband service that uses PTA mode in place	Customer
Credit Check	Account Manager
Non Disclosure Agreement (NDA)	Account Manager / Customer
Direct Debit Mandate	Account Manager / Customer
Account Set up i.e CUG / CA	Account Manager (In place from BB purchase)
Content Connect Billing account set up	Account Manager
Please keep the above information safe as it will be required for CRF completion	Customer
For CSP - Delivery Service Name & Domain Name set-up (and URL Signature Key if required)	Account Manager / Customer
Nominate MyAdmin Administrators	Customer (In place from BB purchase)

MyAdmin Administrators set up including:
      Wholesale Content Services Portal
      Wholesale Content Connect Reporting
      Broadband Secure Content
      EcoPlus
	Customer - Nominated MyAdmin Administrators

Gain access to www.btwholesale.com	Customer – employee

Gain access to:
      Wholesale Content Services Portal
      Wholesale Content Connect Reporting
      Broadband Secure Content
      EcoPlus
	Customer – employee dependant on the role in your organisation

Decide if Fair Usage Policy (FUP) is required	Customer
Decide if Raw logs are required	Customers CSP and BTW SMC
Contract signed	Account Manager / Customer
Gain access to eBilling	Customer Billing representive (In place from BB purchase)
Gain access to One Academy for Computer Based Training Guides	Customer
Submit CRF including FUP and or Raw Logs section if required (ie access to DEDs)	Customer and BTW SMC
The Customers CSP & CC SMC will share information to support completion for the URL Signing - shared key data and HTTP client identifier value (if required).	Customers CSP and BTW SMC
Accept CRF	BTW
ISP & CC SMC will share information to support completion	Customer and BTW SMC
BTW will send acknowledgments of the status of the order from submission of the CRF to completion of the order these are known as KCIs.	BTW

Ordering Check List

4.3   Registering on www.btwholesale.com

ISPs must be registered as a BT Wholesale Customer before they gain access to www.btwholesale.com. This is explained in Appendix 1

4.4   Customer Account Set Up

Before an ISP can place an order for the CC service, the Account Manager will ensure that a credit check is completed, as it is a mandatory requirement and all the necessary customer and billing accounts have been set up.

4.5   MyAdmin Administrator Set up

MyAdmin is a new tool on www.btwholesale.com that gives you improved control over your Authorised Users access to key BT Wholesale systems, saving time and strengthening security. This means that password resets and application requests can now be done via nominated administrators within your company. Use of MyAdmin is a mandatory requirement for all Content Connect customers and is explained in more detail in Appendix 2

4.6   Content Connect Service Order Process

As part of the CC Service, ISPs are required to undertake an on-boarding process with BT. This is designed to identify any interoperability issues between the ISP's and BT's network and manage the risk of potential CC service issues to EUs.

You must have registered on btwholesale.com as a customer before submitting a CRF. Upon receiving the CRF, a check will be made and the order will be rejected if this has not been completed correctly.

Details of the information required to complete the CRF are in Appendix 3.

The CRF is available from: www.btwholesale.com/wcs

On completion of the CC ISP CRF please e-mail it to the CC SMC at cs.service.readiness@bt.com

The following steps will then happen:

1. BT will accept or reject the CRF, with a clear explanation of why the CRF has been rejected where appropriate.

2. BT and the ISP will establish clear rules of engagement between the key contacts during on-boarding.

3. During the completion of the CRF the BT Account Manager, ISP and CC SMC will need to share information with you to support it completion.

4. A dedicated support team will be assigned to you to support you during the on-boarding process.

5. The support team will agree with you the testing timescales. The test will comprise of performing a line speed check on the Performance Tester at each of the nodes to confirm PF traffic is configured for End Users.

Please note to configure your CSP customers to your CC service please refer to the CDN Integration and User Guide which is available on request. This includes order process and technical information in relation to the CC service including Origin Server.

4.7 Fair Usage Policy & Raw Logs

The ISP can choose to share the Raw Logs with its CSP. If you wish to receive Fair Usage Policy (FUP) and / or Raw Logs file which are optional you must complete the form (included within the CRF) to capture technical information to facilitate a 1 or 2 way secured link with BT. If you require FUP and or Raw Log Files, you may have multiple personnel who will need to input to this form. Please complete the form fully including duplication where needed. Full guidance notes are available on the CRF. A slide pack showing samples of the FUP and Raw Log files are available at www.btwholesale.com/wcs

4.8 Keeping Customers Informed (KCI)

KCIs are acknowledgements you will receive regarding how your order is progressing. This will be by email or telephone and will provide you with - amongst other details - your Unique Service Identifier. There are many KCIs, but listed below are the main ones you will receive:

ISP Acknowledgement / Rejection Provide

Confirmation of [ISP Name] IP Address Ranges sent to [CSP Name] - and copied to the ISP.

Ready for Content Connect Commission Test

Content Connect Commission Test Completed

Welcome Letter

KCIs will also be provided for Modify and Cease orders and Fault Reporting

For KCIs in relation to your CSP customers please refer to the CDN Integration and User Guide.

5.   Reporting a Multiple End User Fault

Before raising a fault, you must undertake suitable measures to ensure the fault is not in your domain, i.e.:

- Hardware, i.e. Set Top Box;

- Home environment issue, i.e. wiring;

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- An underlying Broadband Access issue;

- Ensure the End User IP address is configured on the CC Network

Note: stability issues should be dealt with in accordance with the standard Broadband practice - this is not a CC platform issue.

If a suspected fault occurs, please contact the SMC on 0800 0850641 Option 2. Please listen to the options as they may change in the future.

The SMC will be open for fault reporting 24 hours a day, seven days a week (including UK Public and Bank holidays)
- Prior to any fault being raised, you must ensure that you have followed the Structured Questions (SQ) to determine if this is an actual CC fault and not a Broadband Access product fault.

5.1　Raising a Multiple End User Fault

You will need to enter your Service Identifier e.g.

- 20C WCCI000006512 and for

- 21C WCCB000006512

5.2　Structured Questions

You will be asked the relevant Structured Questions (SQs) detailed below when raising a fault. The SQs are provided to enable BT to promptly analyse the incident and act swiftly in determining a resolution for you.

- Contact Details for Fault Updates

    - Phone Number

    - Mobile Number

    - Email Address

- Date fault first identified

- Fault Description - a brief explanation of what behaviour is being seen

    o ICN / ISP Content Network - the ISP is reporting that End Users are unable to access any content

    o IAP / ISP Access Problem - the ISP is reporting that End Users can not access specific content

    o IPP / ISP Performance Problem - the ISP is reporting that End Users are experiencing jitter and buffer issues

5.3   Non End User Service Affecting Issues - Technical Assistance

Where the ISP has network, service or platform issues which are not causing EU faults or the ISP's ability to manage critical aspects of the service, you should contact your Account Manager or Customer Relationship Manager.

5.4   Fault Queries, Updates and Assistance.

If an ISP requires assistance with fault analysis, then it should contact the SMC at cs.service.readiness@bt.com with the subject heading of Content Connect <ISP Name and Service Identifier> or call 0800 0850641, Option 2. Please listen to the options as they may change in the future.

We will respond to you with updates via the contact details submitted during the completion of the SQ, by email or by phone within a target response time of one hour.

The SMC will be open for fault reporting 24 hours a day, seven days a week (including UK Public and Bank holidays).

5.5   Closing a fault

On resolution of a fault, the SMC will contact your Nominated Contact and advise them of the impending closure and the resolution details. Should you wish to challenge the closure, please inform the SMC at cs.service.readiness@bt.com with the subject heading of Content Connect <CSP Name and Service Identifier> or call 0800 0850641, Option 2. Please listen to the options as they may change in the future.

5.6   Single End User Fault

Single End User faults should follow the Broadband Access product fault journey, as detailed in the relevant product documentation.

5.7   Escalation Processes

If you need to escalate an issue relating to the CC service, you can contact the CC SMC at cs.service.readiness@bt.com or call 0800 0850641, Option 2 in the first instance and then request that the issue be escalated as set out below. Please listen to the options as they may change in the future.

Level	Cover	Responsibility	Telephone
First Contact	08.00 to 18.00	BTW Service introduction team Echat http://www.gofastchat.com/sb/btw-sec	0800 0850641 Opt 2
	Out of Hours (24/7)	Calls picked up by duty out of hours team	Same number as above
1st Escalation	08.00 to 18.00	BTW Service introduction Team Leader	0800 0850641 Opt 2
	Out of Hours (24/7)	Calls picked up by duty out of hours team	Same number as above
2nd Escalation	08.00 to 18.00	Service Introduction Manager Jimmy Tickle	0773 924 3902
	Out of Hours	Duty Manager	0131 300 5198
3rd Escalation	08.00 to 18.00	Change Manager WCC Graham Passmore	0779 598 6111
	Out of Hours	Duty Manager	0131 300 5198

Content Connect Escalation Table

Alternatively, contact your Account Manager or Customer Relationship Manager.

Please note that the fault process that your CSP customers will undertake is detailed in the CDN Integration and User Guide. Any Escalations from the CSP customers must be managed by your Account Manager or Customer Relationship manager.

5.8   Scheduled Maintenance

Details of any scheduled maintenance affecting the CC service will be communicated to your Nominated Contact. These updates are also posted on the WCS Portal.

BT will communicate any scheduled maintenance events to you 14 days in advance through the WCS Portal and via email to your nominated contact. We will inform you of the impact, together with the start and finish times.

In the event that you need to inform us of any scheduled maintenance to your network or systems which may have an EU impact or impact to BT, please inform the cs.service.readiness@bt.com with all relevant information including start and finish times.

There is a process to submit an appeal against a CC service scheduled maintenance as detailed in your contract.

5.9   Major Service Outage

Details of any CC Major Service Outage will be communicated via email to your Nominated Contact .These updates are also posted on the WCS Portal.

5.10   Emergency Maintenance

BT may occasionally suspend the Service for maintenance or Service upgrades or because of an Emergency, but before doing so BT will aim to give you as much notice as reasonably possible and - whenever practicable - will agree with you when the Service will be suspended.

Please note notifications in relation to the CC service exclude the underlying Broadband service which may be subject to separate Emergency Maintenance works.

6.   Content Connect Security

The CC CDN infrastructure is deployed within secure BT network core node sites using standard secure data centre environments. All sites are protected by approved physical access controls, e.g. BT ID Cards / Proximity Access, etc.

Please note information about the security features of the CC service can be found in the CDN Integration and User Guide.

7.   Service Level

7.1   Service Level

BTW aims to capacity manage the broadband network to allow 99% of assets to be delivered without a video content player buffer exhaustion event. This is based on the following modelled assumptions:

- 60 minute video content duration

- Video content encoded at a rate requiring 1.6Mbps of network throughput – including TCP/IP overheads.

- 3Mb primary buffer on the video content player.

- Playback commencing when the video content player primary buffer is full.

- Dependant on Content being delivered by a CC delivery service configured to use CC Premium traffic.

- Buffer exhaustion due to 3rd party content player behaviour is not included in the BTW capacity planning rules model.

- Scenarios may occur whereby video content player buffer exhaustion may exceed modelled capacity planning targets i.e.

1. Due to the reactive nature of broadband network capacity planning, there may be a delay in the capacity management process to upgrade the network to meet capacity planning targets in some parts of the BTW Broadband network.

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2. Network utilisation peaks may occur at certain times which may cause content player buffer exhaustion to occur, without triggering the BTW broadband capacity process to upgrade the network due to the short duration of utilisation peaks.

3. Content player buffer exhaustion due to factors other than network contention – such as issues in the Openreach Access Network, issues introduced in the End User premises or faults in the BTW broadband network fixed within target SLAs – are not considered failures in the BTW capacity management targets.

Please refer to your Broadband Access product Service Level Agreement

8.   Changes to your Content Connect Service

8.1   Terminating your Content Connect Service

In order to terminate the CC Service at any given point you must provide written confirmation with a minimum of 90 days notice to the CC SMC at cs.service.readiness@bt.com

8.2   Modifying your Content Connect Service

You may wish to modify your Content Connect Service, i.e.:

- Technology Type change

- Contact detail change

- Adding FUP

- Updating your CSP partners (Provide or Cease)

All modifications must be submitted using the CC CRF. Please e-mail it to the CC SMC at cs.service.readiness@bt.com

The lead time for a modify order is 19 working days.

9.   Content Connect Customer Reports

9.1   Customer Reports

Dashboards will be available via the WCC Reporting application on the WCS Portal. A number of reports will be provided with the capability for the ISP to drill down on each for further granularity.

Your CSP customers can be provided with reports please refer to the CDN Integration and user Guide.

A computer based training (CBT) guide will also be available to help with navigating and understanding the reports. This CBT will be available on our One Academy training system shortly after launch- to gain access please refer to appendix 5.

10. Billing

10.1   Billing Method and Frequency

Your Content Connect traffic will be shown as a separate line item in your existing Broadband bill and will be in GBs Shipped.

Each contractual relationship you have with a CSP for CC will be shown as a separate billing account showing total usage in GB shipped per month and any BT supplied Origin Server storage if applicable.

Your bill is available via:-

- eBilling through WCS Portal (file download).

To gain access to the eBilling application, go to www.btwholesale.com then click on the 'Subscribe to Other applications' link on the Customer Zone landing page and request access to the eBilling application. The lead time is 24hrs. The eBilling application is not managed via the MyAdmin functionality.

Please note only one user per ISP will be able to have access to eBilling.

A sample bill is available at www.btwholesale.com/wcs

If you have any queries with your bill, please contact your Account Manager.

11. Glossary of Acronyms and Abbreviations

20CN - 20th Century Network (pre-NGN)
21CN - 21st Century Network (NGN)
ACL - Access Control list
BE - Best Effort is traffic that has no priority over the network
BRAS - Broadband Remote Access Server
BTW - BT Wholesale
BTW.com - This is BT Wholesale web site at www.btwholesale.com CC Standard - Content Connect Standard
CC Premium - Content Connect Premium
CDN - Content Distribution Network is a localised cache in BTW network
CUG - Customer User Group this a unique customer assigned reference
ISP - Internet Service Provider
CSP - Content Service Provider being the supplier of Content
DEDS - Data Exchange Distribution System (Storage area for Raw logs)
DNS - Domain Name System, Internet system to translate names into IP addresses
DSCP - Differentiated Services Code Point
EcoPlus - is the system that our fault management uses, this can also be used to modify orders

EoI - Equivalence of Input
EU - End Users this term relates to the final recipient of the Content (i.e. PC or Set Top Box user)
FUP - Fair Usage Policy provides Raw log files which are held on DEDS
ID - Identity
IPsC - IPstream Connect is the 20c Broadband Access Product
MSO - Major Service Outage of the network
PEW - Planned Engineering Works is a notice of maintenance
PF - Premium Forwarding, the traffic marking description used for supporting higher priority traffic for the CC Premium service
QoS - Quality of Service
T&C's - Terms and Conditions that you sign to take the CC Service as a feature of Wholesale Broadband Connect (WBC) or IPstream Connect (IPsC)
URL - Uniform Resource Locator
WCS Portal - Wholesale Content Services Portal at www.btwholesale.com/wcs

12. Document History

This section provides a brief description of the changes between this issue of the CC ISP Operational Handbook and previous issues. Please refer to the main body of the document for full descriptions of each topic.

Version	Date	Description of change
Issue 1	March 2011	Creation
Issue 2	December 2011	Updated to capture change of product

Appendix 1 - Becoming a BTW Customer

ISPs must be registered as a BT Wholesale Customer. This can be done at www.btwholesale.com

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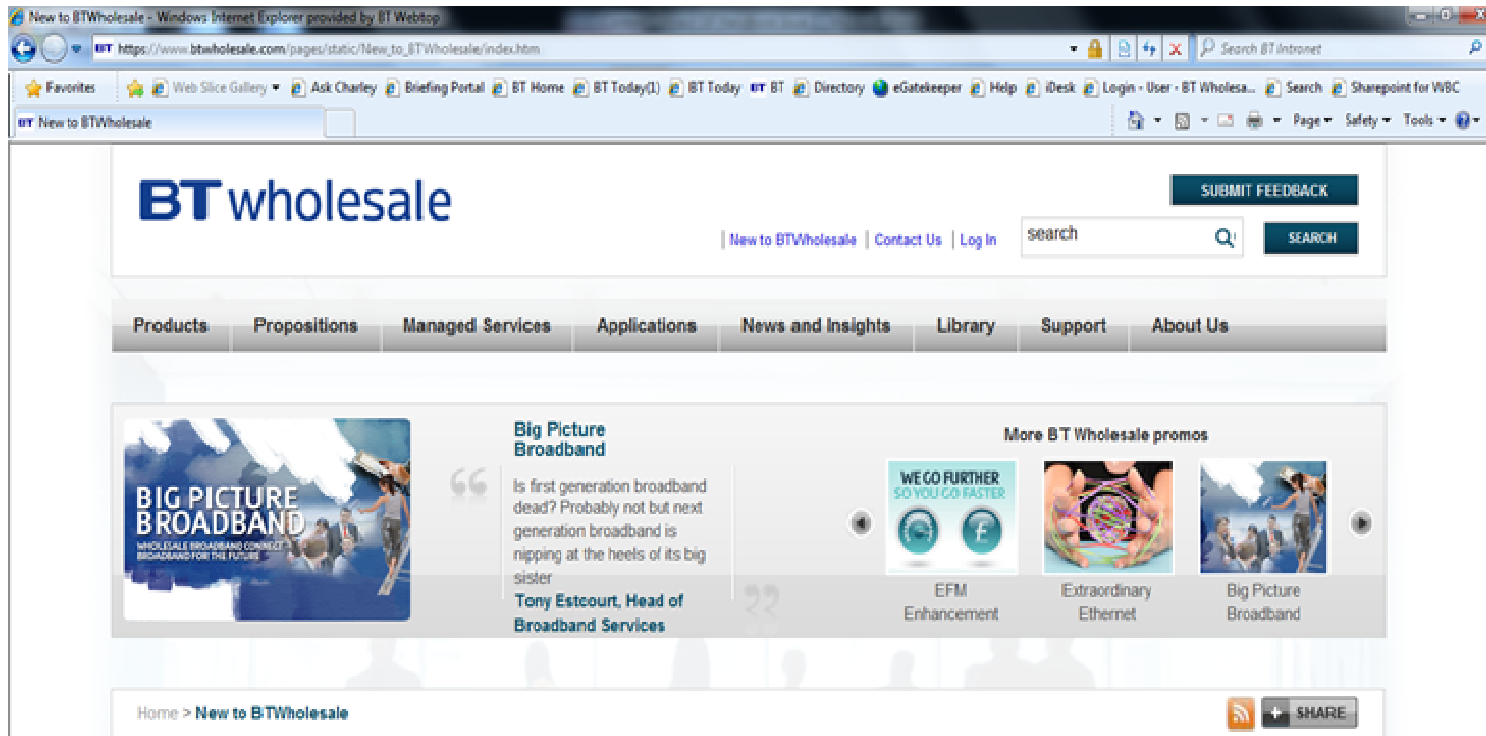
New to BT Wholesale?

We are Europe's largest wholesale communications business by revenue and market share. Our business is based on helping communication providers, ISPs, resellers and other companies just like you to grow.

We offer a wide range of products and services on traditional, next generation and IP based networks. These can bring great benefits to your business, such as improving your efficiency or enabling you to expand into new markets. Many of them you can sell on to your customers, often under your own brand.

Our customers choose us as their wholesale partner because we have earned a reputation over many years for trusted delivery, for continual and sustained improvements in service quality and a track record in bringing innovation and new services to the market.

If you're interested in becoming our customer we have a dedicated team waiting to welcome you and provide you with all the advice and information you could need. You will also get an account manager to look after you, plus we have experienced technical specialists and service delivery managers ready to help.

If you are ready to start give us a call on 0800 671045 or email us at clientreception@bt.com.

Do you want to join us?

REGISTER NOW

Need Help?

▸ Contact us

When registering your company on www.btwholesale.com Company Registration Number will be required if this is not known please contact your Account Manager or Customer Relationship Manager who will assist you.

The company name that you register must then be shared with your designated Administrators for MyAdmin function.

Registering for www.btwholesale.com
Upon registration and confirming an interest in purchasing CC, the Customer will need to gain access to www.btwholesale.com
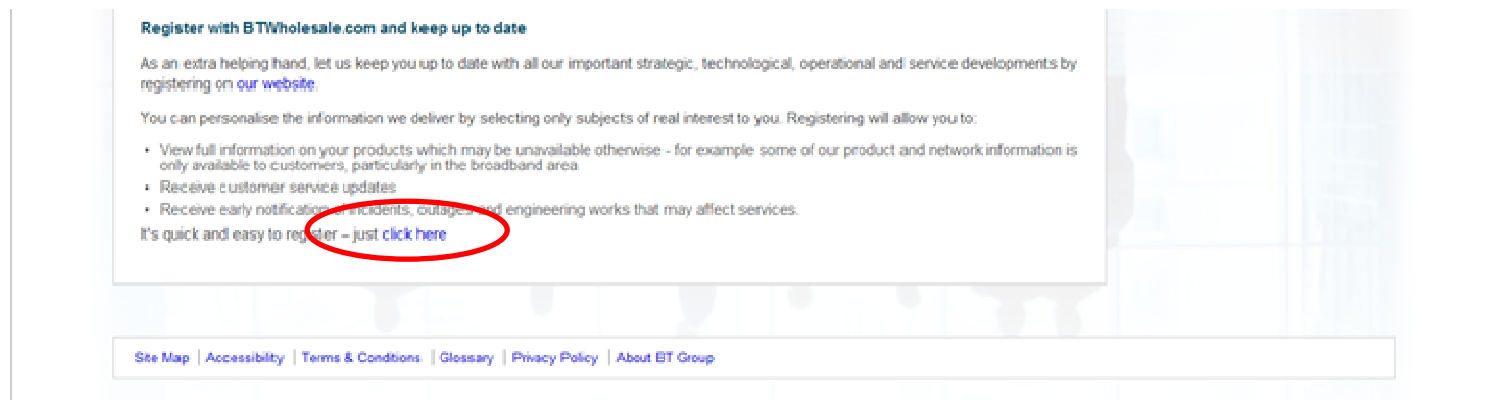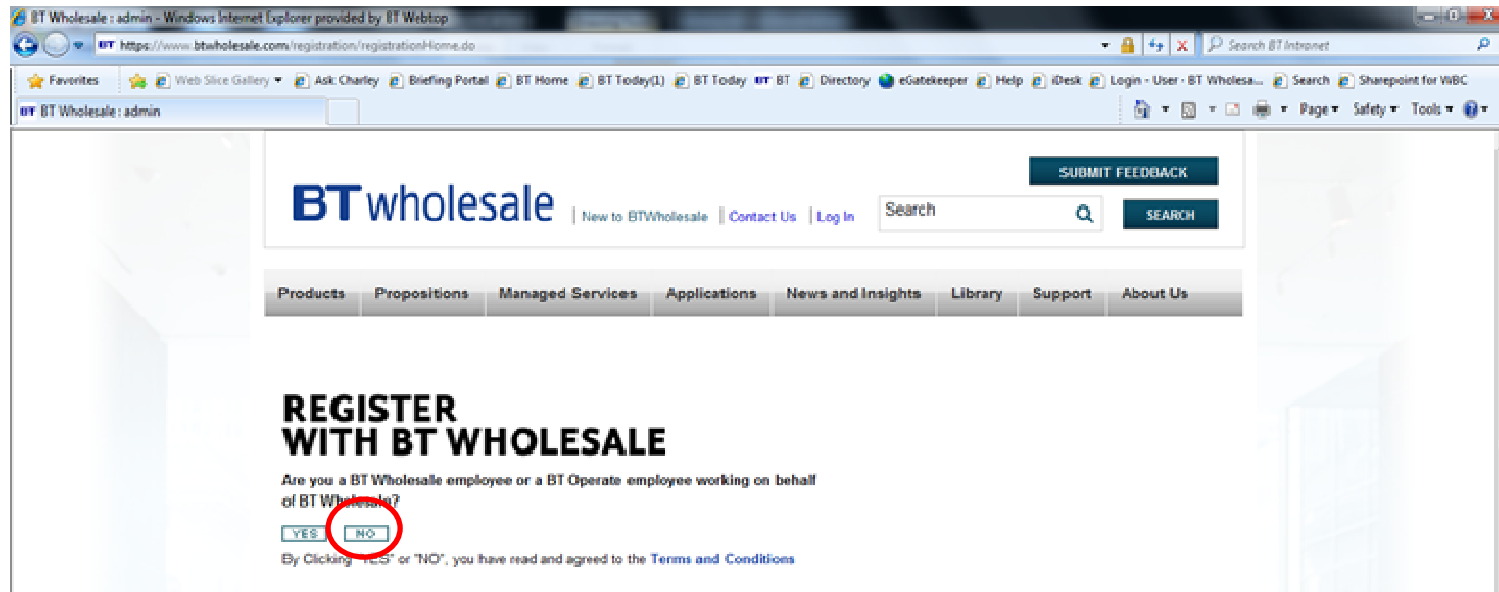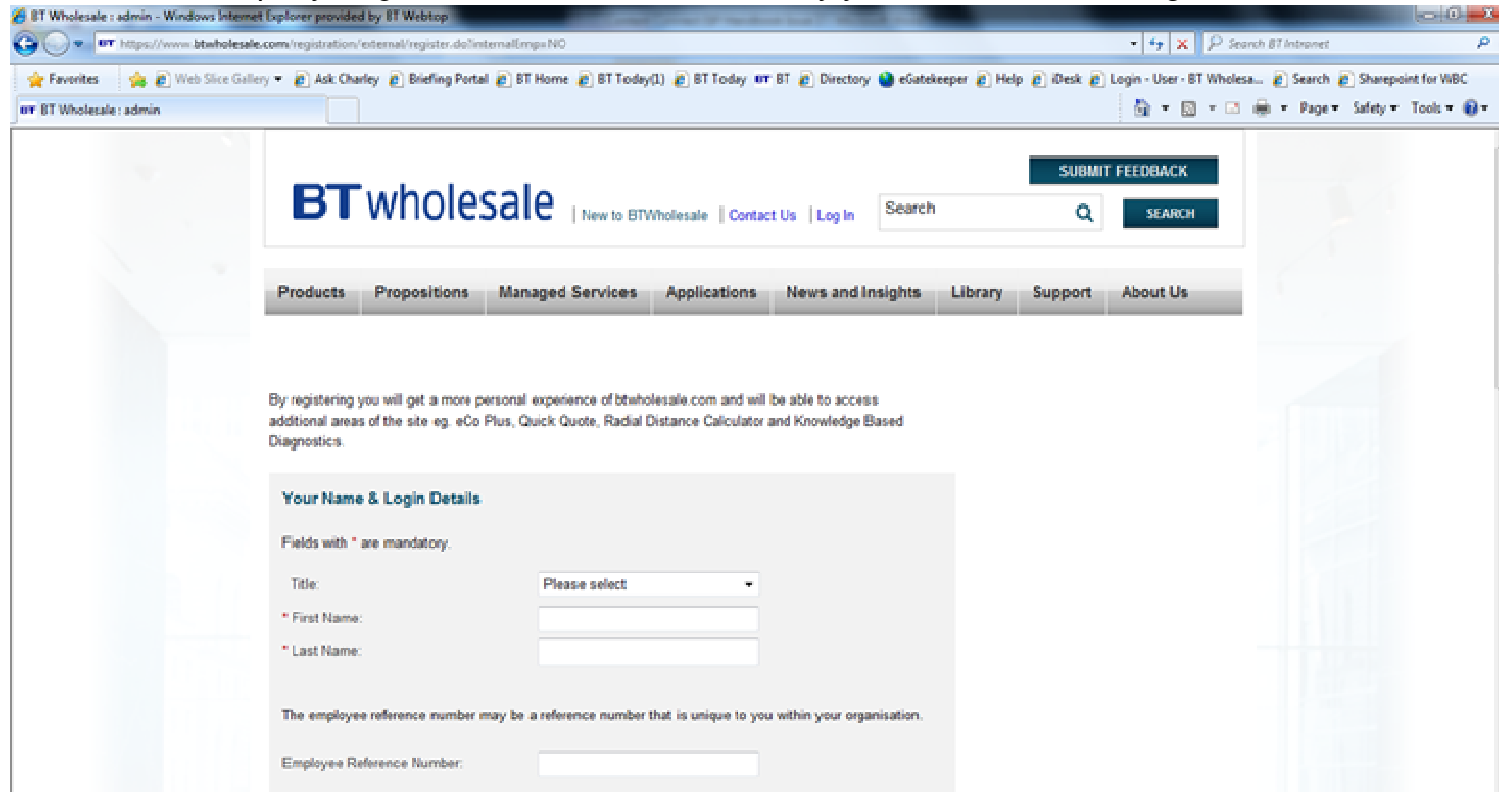
BT will require the DUNS ID and Company Registration Number. A DUNS ID can be obtained from http://www.dnb.co.uk/?country=uk

Please note that the DUNS ID is a mandatory piece of information required which will be used throughout our processes for Content Connect. Upon receiving the CRF, a check will be made and the order will be rejected if this has not been completed correctly.

Fill in personal details as requested and when it gets to Company Details, click on "Cannot find my company name", which then enables the registration of a new company.

Under Customer ID, please enter number as advised by your BT account manager

Please enter Company Registration Number as advised by your BT account manager

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The employee reference number may be a reference number that is unique to you within your organisation.

Employee Reference Number:

Username should be at least 6 characters and not in the format of an e-mail address.

* Username:

Passwords must have at least 8 characters, should contain letters and numbers and be case sensitive.

* Password:

* ReType Password:

Password Reminder

Please enter three unique security question and answers. These will be used should you need to reset your password or unlock your account. Upon answering this question correctly, a new password will be sent to you by email.

* Security Question 1:   Please Select

* Your Security Answer:

* Security Question 2:   Please Select

* Your Security Answer:

* Security Question 3:   Please Select

* Your Security Answer:

Contact Details

* Your email: _____

* Retype Your Email: _____

Please do not add spaces when entering your telephone number

* Telephone number: _____

Extension: _____

Company Details

* Company Name: _____ [SEARCH]

Please select your company name (a list of companies will be suggested as you type) if your company is not listed please click on **Cannot find my company name**

Are you a Third Party Consultant?

○ Yes

⦿ No

Third Party Company Name: _____

Please enter the complete legal name

[SUBMIT]

Appendix 2 - MyAdmin Administrator and Set up

MyAdmin is a new tool on www.btwholesale.com that gives you improved control over your employee's access to key BT Wholesale systems, saving time and strengthening security. This means that password resets and application requests can now be done via nominated administrators within your company. Use of MyAdmin is a mandatory requirement for all Content Connect customers.

Once you have nominated and set up your Administrators on MyAdmin they can set up your nominated users. Your nominated users can apply for access to the BTWholesale.com portal and systems detailed below. Your Administrator can authorise or decline requests and will also have the responsibility for BTWholesale.com portal account reactivations.

Please note when your Administrator is requesting MyAdmin access they must use exactly the same company name used in registering the company with BT Wholesale as mentioned in Appendix 1. The impact of not using the correct name will mean that you will have to reapply.

A MyAdmin application form, user guides and training videos on how to apply to set up Administrators can be found at this URL:

https://www.btwholesale.com/pages/static/Applications/myadmin/index.htm

The application accesses that can be set up by your Administrators for your employees to access from the MyAdmin are:

- Wholesale Content Services Portal. Please note the user only not the administrator will be asked for an access code this is 111111 when applying

  A dedicated home page to WCS Portal which provides a single page to access applications detailed below and provides additional information from a single point such as.

  - News

  - Service status

  - Content Deletion

- Self Service (Faults and modifications)

- Billing

- Administration (For your administrators to manage accesses)

- Help and Support (Documentation)

- Wholesale Content Connect Reporting. (WCC Reporting) Please note the user only not the administrator will be asked for an access code this is 222222 when applying

- Broadband Secure Content
  - This allows access to secure information about the product

- EcoPlus
  - This system will be used for modifying usage commitment, configuration changes and reporting a fault.

Once the WCS Portal access has been set up, you can access the system directly from www.btwholesale.com/wcs

The lead time for setting up an Administrator is 5 working days.

In the event that MyAdmin fails please email btwholesale.direct@bt.com, this mailbox is supported 0900 -1700, Monday to Friday Excluding UK public and bank holiday.

Please note: MyAdmin is a mandatory process so that you the customer manage the access rights of your staff/users.

Managing Internet Service Provider User's Access

Before an ISP user can be self served by their Administrator using MyAdmin, the ISP user must follow the steps below.

Setting up a ISP User to Wholesale Content Services on www.btwholesale.com

1) ISP User registers on www.btwholesale.com/register. please ensure you use the company name that was used when registering the company with BT Wholesale as mentioned in Appendix 1 contact your company`s Administrator if in doubt.
2) Keep a record of your user name and password.
3) ISP User logs in to www.btwholesale.com by giving their username and password as already set up via the landing page of www.btwholesale.com
4) The ISP User clicks on the 'Subscribe to Other applications' link on the Customer Zone Logged In Page and requests access to the applications listed above and in the check list table.
5) If an Administrator has been setup for the user's company, this users request would be sent to the Administrator; it is paramount that your administrator is set up prior to system applications being made.
6) The Administrator can validate the request and grant access to the WCS Portal, Wholesale Content Connect Reporting and EcoPlus
7) When granting access, the Administrator will associate the appropriate WCS Portal role with the WCS Portal user's profile.
8) The Administrator can also be setup to grant access to EcoPlus and WCC Reporting applications to the requesting user. For granting access to EcoPlus, the Administrator user must first have CUGs set up on EcoPlus against their profile which associates the user with the correct company (only when the Administrator has CUGs against their profile, can they associate CUGs with other users to whom they are granting access).

Removing User Access to WCS Portal on www.btwholesale.com

Revoking access to WCS Portal will remove this association from a user's profile - they will remain as BTW.com users.

For your CSP customers access please refer to the CDN Integration and User guide.

NOTE - removing access to WCS Portal will not automatically remove access to EcoPlus, WCC Reporting or any other applications. The Administrator should revoke access to each application separately if required.

Appendix 3 - Customer Requirement Form (CRF)

You must have registered on btwholesale.com as a customer before submitting a CRF. Upon receiving the CRF, a check will be made and the order will be rejected if this has not been completed correctly.

Company and Contact Details

In order to complete the CRF, the following key information needs to be supplied:

- Company details including DUNs ID

- Primary, Secondary, Technical and Billing contact details

Service Details

- Order Type, i.e. is the request a Provide, Modify or Cease

- Technology Type - i.e. Content Connect to be supplied on your WBC, IPSC or Both BTW Broadband Access products

- Service Identifier only required if the order is a Modify or Cease

- Billing Account details of the BTW Broadband service/s you purchase

- WBC Aggregation Point and IPSC Handover Indentifiers

- Predicted usage

- Please also ensure a Customer Required by Date has been submitted on the CRF in line with the projected lead time from CRF submission of the type of order you are placing

- Details of each of your CSP Partner

Fair Usage Policy (FUP) and Raw Logs

This section of the CRF is to capture technical information to facilitate a 1 or 2 way secured link with BT. If you require Fair Usage Policy and or Raw Log Files which are optional, you may have multiple personnel who will need to input to this form. Please complete the form fully including any requests for duplication where needed. Full guidance notes are available on the CRF

- The top part of each table will be relevant to the system personnel

- The bottom half will be relevant to the network/firewall personnel

- The purpose of the 2 tables is to split the incoming and outgoing connections for each company

- You may wish to have different access systems for each direction

- We recommend one system and one network connection for both directions

- There are two forms of secure electronic transfer

    - 1 way is a ISP or BT initiated secured electronic transfer

    - 2 way is when both BT and the ISP initiate secured electronic transfers

- Once completed, configurations and implementation can progress both within BT and your company for setup during the Provide Order lead-time of 19 working days

- This form will then be used to record connections

- If there is an existing link that can be utilised, please provide all relevant information including current usage.

You can submit a request for access to FUP when completing the CRF or any other time whilst contracting to take the Content Connect service.

Registered office: 81, Newgate Street, London, EC1A 7AJ
Registered in England no. 1800000

Access to the Data Exchange Distribution System (DEDS) will be granted once the FUP has been configured. The lead time for this is 5 working days dependant on firewall configurations.

A presentation is available in the Help and Support section on www.btwholesale.com/wcs which explains FUP.

FUP and Raw logs are archived on Day 2 and will then be made available for 30 days. After the 30 days they will be deleted, this is due to the size of files being held.

Appendix 4 - Requesting Access to the One Academy

In order to request access to the One Academy, you must first send an email to the Training team.

You can access the One Academy via the BTWholesale.com site, using the URL

http://www.btwholesale.com/customertraining

This page will list the appropriate system requirements as well as a user creation form and a training administrator user guide.

Select the 'Customer training link' which will take you to the One Academy.

If you are a company that does not already have access to the One Academy, please create and send an email to the address product.marketing@bt.com. The email must contain the following information:

- Company Name

- Contact Person

- Email Address

- Phone Number

- Address Line 1

- Address Line 2

- Address Line 3

Registered office: 81, Newgate Street, London, EC1A 7AJ
Registered in England no. 1800000

- Region

- Postcode

If your company is already registered to the One Academy and you do not have access to an Administrator, you must create and send an email to the address 'product.marketing@bt.com'. The email must contain the following information:

- Company Name

- Department

- First Name

- Last Name

- Email Address

- Telephone Number

Once the request has been submitted, access will be granted to you as soon as possible, usually within the next 24 hours.

Levels of Access

There are currently two levels of access. There is the standard level, which is the standard access for a user looking to use the Academy for training and reference purposes and there is Administrator access aimed at managers and directors wanting to keep track of staff e-learning and performance.

Administrator access will also allow you to add additional users to the Academy. If you require Administrator access, please create and send an email to the address product.marketing@bt.com