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Magrathea Secure Services Access Guide

Encrypted connections to some Magrathea services are now available to all clients using existing login details. There is no need to request secure access as the following services can be used interchangeably with the current non-encrypted version of the same service.

This guide includes details of the various services which can now be accessed over fully encrypted, secure connections and we have included examples of common tools and utilities which may be used to access the services in a secure fashion.

We do not mandate that you use the access mechanisms listed but are unable to provide support for alternative methods of access due to the huge variation of client applications which may be used to make connections.

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Secure NTSAPI access

Should you have issues connecting using a mechanism not listed in this guide then please see your Systems Administrator for assistance.

The NTSAPI can be accessed through a TLS/SSL tunnel, offering encryption to the entire process including both the login phase and also all data passed in both directions.

To make a connection, please connect using port 777 to the secure.magrathea-telecom.co.uk server (instead of api.magrathea-telecom.co.uk).

Any SSL client can make this connection and you then login to the NTSAPI as normal, the only operational difference being that the connection is encrypted.

Unfortunately, PuTTY is not able to make connections using SSL so if you are currently using PuTTY then you will need to find an alternative client.

Interactive Access (Windows for those currently using PuTTY)

There are various Telnet over SSL clients available. One free example can be downloaded from http://www.apps.danbalthaser.com/telnet/index.htm

The basic setup is the same for any client: connect to secure.magrathea-telecom.co.uk on port 777 and enable SSL as the connection type:

File	Disconnect	Cls	Tools						
secure.m	nagrathea-telecor	n.co.uk				Port 777	* *	Use SSL	Connect
system> System> System> Server>	Connecting Ready to sen Ready to rec 0 Magrathea	d data ieve d NTS Gw	to serve ata (ntsapi.	r c(V0.1))					
									Send



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Interactive Access (Linux or Windows with Cygwin)

As an example, from a Linux machine (or a Windows machine with Cygwin and OpenSSL installed), the OPENSSL client can be used to initiate the connection, instead of telnet:

openssl s_client -connect secure.magrathea-telecom.co.uk:777

In addition, any application which is capable of making use of an 'openssl' library should connect without any problems, so if you have automated connections into the NTSAPI (for example in PHP) then you should simply be able to change the connection type to use SSL.

System Based access (based on our example PHP)

If you are using our example PHP to connect then simply change the existing connection line as follows (you will need to ensure your PHP was built with the '---with-openssl' option for SSL to be available):

//\$fp = fsockopen("api.magrathea-telecom.co.uk",777,&\$errno,&\$errdesc); \$fp = fsockopen("ssl://secure.magrathea-telecom.co.uk",777,&\$errno,&\$errdesc);

If you are using other connection methods, then please consult your developers to determine how you can change your existing connections so that they are encrypted. On most systems an SSL library (often OpenSSL) will need to be installed and configured.

Secure FTP CDR downloads

Daily CDRs can now be downloaded by FTP over a TLS/SSL connection.

Please note that this is an FTP connection which uses SSL to encrypt it and is different to SFTP.

To make a connection, please continue to connect to cdr2.magrathea-telecom.co.uk on port 21 but set your FTP client to require a TLS/SSL connection and use your existing username and password.

Not all FTP clients are able to be configured to make these connections (neither the standard FTP on Windows or Linux are capable of encrypted SSL connections) so you may have to change the FTP client you are using.



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Interactive FTP Client (Windows or Linux)

There are various FTP with TLS/SSL clients available and one free example is FileZilla which is supported on both Windows and Linux and can be downloaded from http://filezilla-project.org/ (though you can use any FTP client which supports FTP with TLS/SSL).

The following examples are taken from the Windows version.

To setup a connection to Magrathea for CDR download, open FileZilla then then select *"File->Site Manager"* from the main menu.

Click "New Site" and then "Rename" this to something meaningful (for example 'Magrathea FTP SSL')

Then set the Host to be *cdr2.magrathea-telecom.co.uk*, change the Encryption setting to "*Require explicit FTP over TLS*" and set the Logon to be "*Ask for password*" and then enter your FTP username Site Manager

Select entry:	General Advanced Transfer Settings Charset
	Protocol: FTP - File Transfer Protocol 🗸
magnatical in SSL	Host: cdr2.magrathea.net Port:
	Encryption: Use explicit FTP over TLS if available $\qquad \checkmark$
	Logon Type: Ask for password V
	User: Solo-test-ftpcdr
	Password:
	Background color: None V
	Comments:
New site New folder	^
New Bookmark Rename	
Delete Duplicate	· · · · · · · · · · · · · · · · · · ·
	Connect OK Cancel

Click 'Connect' and in the dialog that pops up, enter your password and click OK. You will then be presented with the certificate dialog:



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Unknown certificate	×
The server's certificate is unknown. Please carefully examine the certificate to make sure the sen Compare the displayed fingerprint with the certificate fingerprint you have received from your s	ver can be trusted. server
administrator or server hosting provider.	
Certificate in chain: 0 (Server certificate)	
Certificate Overview	^
Fingerprint (SHA-256): 02:97:46:6f:8a:c2:73:d7:80:a1:a2:19:b5:ed:ad:1d: d9:ad:4b:e0:3f:03:c4:00:29:f8:d3:b4:17:8e:32:dc	
Fingerprint (SHA-1): 01:b7:20:73:51:00:8c:3a:4f:9e:1c:f1:2f:c3:e8:6c:81:5e:39:9e	
Validity period: From 16/02/2023 00:00:00 to 18/03/2024 23:59:59	
Subject	
Common name: cdr2.magrathea.net	
Organization: Magrathea Telecommunications Limited	
Country: GB	
Locality: Reading	
Alternative name: cdr2.magrathea.net	
Issuer	
Common name: DigiCert TLS RSA SHA256 2020 CA1	
Organization: DigiCert Inc	
Country: US	
Details	
Serial: 05:55:b0:ed:3e:8f:2a:4c:73:5d:a0:2c:03:5f:8d:eb	
Public key algorithm: RSA with 2048 bits	
	×
Session details	
Host: cdr2.magrathea.net:21	
Protocol: TLS1.2 Cipher: AES-256-GCM	
Key exchange: RSA Mac: AEAD	
Trust the server certificate and carry on connecting?	
Always trust this certificate in future sessions.	
Trust this certificate on the listed alternative hostnames.	
ОК	Cancel

Once you are satisfied that this is the genuine certificate tick the 'Always trust certificate in future sessions' box and click OK to complete the connection.



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Once connected, you simply drag and drop your CDR files from the Magrathea CDR site to your local PC

File Edit View Transfer Server	r Bookmarks Help						
	比 🕄 🐘	E 🔍 🍳 🤼					
Host: Usernar	me:	Password:	Port:		Quickconnect 💌]	
Host: I Usernar Status: Resolving address of cdr Status: Connection to 87.238.73 Status: Connection established, Status: ILS connection establish Status: Logged in Status: Retrieving directory listir Status: Directory listing of "/" su	mei 2.magrathea.net .50:21 waiting for welcome n ned. ng uccessful	Password:	Port:		Quickconnect		
Local site: E:\RDS_Users\SOLOMON	VN\ ~	Remote site: /					
This PC	×						
Filename	Eilosiza Eilotuma	Filename	Filesize	Filetype	Last modified	Permissions	Owner/Group
	Thesize Thetype	.					
Application Data	File folder	cdrext-20230701.zip.asc	1,422	ASC File	06/09/2023 17:	r	user group
Contacts	File folder	cdrext-20230702.zip.asc	1,418	ASC File	06/09/2023 17:	r	user group
Desktop	File folder	cdrext-20230703.zip.asc	1,418	ASC File	06/09/2023 17:	r	user group
	File folder	cdrext-20230704.zip.asc	1,439	ASC File	06/09/2023 17:	r	user group
☆ Favorites	File folder	cdrext-20230707.zip.asc	709,553	ASC File	06/09/2023 17:	r	user group
Links	File folder	cdrext-20230708.zip.asc	280,081	ASC File	06/09/2023 17:	r	user group
J Music	File folder	cdrext-20230709.zip.asc	188,021	ASC File	06/09/2023 17:	r	user group
🔮 My Documents	File folder	cdrext-20230710.zip.asc	835,543	ASC File	06/09/2023 17:	r	user group
My Pictures	File folder	cdrext-20230711.zip.asc	786,501	ASC File	06/09/2023 17:	r	user group
Saved Games	File folder	cdrext-20230712.zip.asc	729,496	ASC File	06/09/2023 17:	r	user group
🔎 Searches	File folder	cdrext-20230713.zip.asc	/45,518	ASC File	06/09/2023 17:	r	user group
Start Menu	File folder	cdrext-20230/14.zip.asc	095,732	ASC File	06/09/2023 17:	r	user group
📑 Videos	File folder	cdrext-20230/15.zip.asc	2/9,/56	ASC File	06/09/2023 1/:	r	user group
		cdrext-20230/16.zip.asc	182,874	ASC File	06/09/2023 1/:	r	user group
		cdrext-20230/1/.zip.asc	813,849	ASC File	06/09/2023 1/:	r	user group
<	>	cdrext-20230/18.zip.asc	798,916	ASC File	06/09/2023 1/:	r •	user group
13 directories		65 files. Total size: 35,498,315	i bytes	ASC FILE	00/09/2023 1/:	r	user droub
Server/Local file Di	irection Remote file	,	Size Priority	Status			
Queued files Failed transform	Successful transferr						
spectrum runcu cumarcia	succession cromaters						

🛃 Magrathea FTP SSL - Solo-test-ftpcdr@cdr2.magrathea.net - FileZilla



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Interactive FTP Client via HTTPS

Another way FTP can be accessed, is through a HTTPS, offering encryption to the entire process. To make a connection, please launch a web browser and enter the URL **cdr2.magrathea-telecom.co.uk**. Next, enter your assigned credentials to gain access

0 8	⊷ https://cdr2.magrathea.net/WebIr	erface/login.html	<u></u> ස
		Lagrance	
		Password	
		LOGIN	
			J
		Contact us: 5 Commerce Park Brunel Road Theale RG7 4AB Tel: 0345 004 0040 (+44 118 321 0321) Fax: 0345 004 0041 (+44 118 321 0301) email us at info@magrathea-telecom.co.uk © Magrathea Telecommunications Ltd	

Once launched, simply select your CDR files from the Magrathea CDR site and download them onto your local PC, by clicking on the download tab at the top of your screen.

🕞 Download 🗞 User Options 🕫 Search 🥁 Add To Basket 🛒 Show Basket 🔓 Logout						
Filter Clear @ Select = Show 100 items on page						
□ Name	Size	Modified				
cdrext-20230701.zip.asc	1.4 KB	09/06/23				
✓	1.4 KB	09/06/23				
✓ Ocdrext-20230703.zip.asc	1.4 KB	09/06/23				
✓ O cdrext-20230704.zip.asc	1.4 KB	09/06/23				
✓ Orderext-20230707.zip.asc	0.7 MB	09/06/23				
✓	273.5 KB	09/06/23				
✓ ○ cdrext-20230709.zip.asc	183.6 KB	09/06/23				
✓ Ocdrext-20230710.zip.asc	0.8 MB	09/06/23				
Cdrext-20230711.zip.asc	0.8 MB	09/06/23				
Cdrext-20230712.zip.asc	0.7 MB	09/06/23				
cdrext-20230713.zip.asc	0.7 MB	09/06/23				
Cdrext-20230714.zip.asc	0.7 MB	09/06/23				
Cdrext-20230715.zip.asc	273.2 KB	09/06/23				



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Automated or Command-Line access (Linux)

As an example, from a Linux machine, the LFTP client can be used to initiate the connection and force the TLS/SSL mode.

To do this, please either add the following to your lftp.conf file (usually found in /etc/lftp.conf) or enter the lines as commands once you have started lftp:

set ftp:ssl-force yes set ftp:ssl-protect-data yes set ftp:ssl-protect-list yes set ssl:check-hostname yes set ssl:verify-certificate yes

To make the connection:

```
Iftp -u username, password cdr2.magrathea-telecom.co.uk
```

Once connected, you can list the directory and enter commands as you would with any other FTP client.

Secure access to your Account Balance

Connections to retrieve the current balance of your account made via the RestAPI or Client Portal are made securely.

Secure Access to the Porting Portal

Connections to the Porting Portal can be made using a normal web browser to

https://portal.magrathea.net/portal/