



DWM Technical Solutions Ltd

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Brookfire



DWM Technical Solutions Ltd is an innovative organisation striving to research, design and install cutting edge technology into the networking, audio visual and electrical sectors. We aim to deliver and integrate solutions for our clients across a network platform to provide high quality, efficiency and control.

Since inception over 13 years ago DWM have steadily grown from strength to strength, supplying a high quality service to an expanding high profile customer base. We pride ourselves on having the resources internally to research, design and integrate to the best possible standards.

In an age where companies are striving to cut overheads by reducing their PAYE resource, DWM are going against the trend, understanding that to deliver consistent and high quality levels of service we must possess a strong, reliable and highly skilled team.

Our comprehensive, competitive and friendly service has ensured that our existing customers have stayed loyal to us and we thank them for their continued support.

We feel that our personal and friendly approach coupled with our aspirations to introduce and combine new technologies has allowed us to apply our trade within the premises of some of the most well respected organisations in the UK.

Every project is treated with the same comprehensive procedure; from servicing immediate requirements, anticipating unforeseen eventualities, to being forward thinking and introducing new ideas and strategies to maximise client investment.

As a result of our projects we are proud of the business relationships we have developed, many of whom we now consider to be close friends and hold their requirements in the highest regard. By using DWM Technical Solutions you can be assured of receiving an honourable, forward thinking and professional service.

Mr Robert Munday

Director

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- Data Cabling
- Voice Cabling
- Fibre Optic Cabling
- Network Switching
- Network Security
- Wireless LAN
- Point to Point Links



The attitude, performance and amenability of your Engineers was for me outstanding. I am always pleased how flexible DWM is for us; especially when the goalposts change constantly.

*London Luton Airport*

## NETWORK INFRASTRUCTURE

The network infrastructure is today a fundamental part of any building and business's make up.

Today a well-designed and high performing network infrastructure platform can deliver a huge range of IP applications, without the requirement of vendor specific cabling solutions.

Therefore when designing our network infrastructure solutions we would first and foremost ascertain which of the IP applications our customer may require both now and in the future.

A typical network infrastructure design may include presentation to service the following IP applications: Voice Transfer, Data, Video, Alarms, Environmental Control, Lighting, Security, Access Control, Audio, IPCCTV, IPTV, Digital Signage, Wireless and much much more.

Historically, telecommunications cabling within and between premises comprised mostly application or vendor specific systems - which DWM are trying very hard to encourage our customers to move away from.

A well designed and forward thinking network infrastructure solution can deliver the following advantages:

- Reduced IT support maintenance
- Optimum network performance to support network speeds both now and in the future
- Minimal points of failure
- Increased network resilience
- Flexibility to embrace new IP technologies at minimal cost
- Scalability

Network infrastructure design and implementation remains at the very core of our business expertise. We continue to support existing and new customers to make only the most informed decisions to ensure our end user customers maximise investment and can continue to express their network ideas with confidence.



## ELECTRICAL SERVICES

DWM's Electrical Services Division provides a wide range of electrical installations and services in all types of commercial, industrial, education and public sector establishments.

Such services vary in size from small to large projects, from the installation of additional socket outlets to the complete provision of electrical and lighting services for new or refurbished large commercial premises.

Our service is inclusive of full design, supply, installation and documentation and with the assistance of our ECA, NICEIC and Elecsa accreditations we can apply warranties and support to provide our customers with the peace of mind they require.

Planned routine or incidental maintenance and repairs can also be provided, giving reliable comfort for the continuity of customer's essential processes or services.

All work is supported by full test certificates produced at the time of practical completion of contract.

DWM retain an extensive PAYE electrical engineering team, all of whom are JIB registered and are qualified to 17th Edition. With these labour resources in place we feel that we are well positioned to offer our clients a swift and effective response to meet their requirements.

Our experienced and professional team will also ensure all electrical installations are applied in accordance with current BS7671: 2008, 2011 – Amendment 1 Requirements for Electrical Installations.

Our continued dedication to customers, and our commitment to training, continues to allow DWM to offer and supply a first class service – for the community and the environment.

The electrical installation department forms an integral part of the company's versatile package solution; and with our foundations also firmly within the IT sector we are striving forward in the implementation of networked power management which can connect directly to your Ethernet network.

- LV Power
- Lighting
- Emergency Lighting
- UPS & Generators
- Fire Alarms
- Testing & Inspection
- Energy Management



“

Thank you for the quick attendance. We were delighted with the efficient works that were done and the pleasant manor in which they were conducted.

*Mitie Technical Facilities Management*

- Server Design
- Personal Computers
- Support & Maintenance



We think your team at DWM are fantastic. Not only are they efficient and helpful but also good at creative problem solving! We have felt that your staff team have been genuinely interested in our organisation and committed to helping Adoptionplus develop.

*AdoptionPlus*

## IT SERVICES

DWM Technical Solutions Ltd can provide a broad range of IT services and solutions for many industries, from start-up businesses to large multi-office organisations.

Whether you'd like us to proactively manage your computer network or to assist your onsite staff, DWM have the skilled personnel in place to assist.

DWM are committed to providing cost-effective, custom-fit, quality-assured IT solutions. Our consulting services are delivered using rigorous industry standard best practices, supported by comprehensive methodologies.

This disciplined approach serves to virtually guarantee the implementation of quality products and services.

Although highly disciplined, the approach is flexible in recognition that each customer is unique and to achieve success, we need to be forever conscious of each customer's specific needs and requirements, business goals and objectives, and above all the unique organisational culture.

Key elements of our approach include:

- Communications that promotes a high level of interaction amongst all stakeholders
- Clear and concise documentation and reports
- Highly skilled and experienced personnel with a proven track record of success
- Objectivity
- Quality
- Completion within timescale and budget



### INTERNET SERVICES

DWM provide cost-effective and reliable solutions across a whole range of Internet Services to include:

- Broadband
- Direct Internet Access (DIA)
- Leased Lines
- Ethernet Services
- IP-VPN
- MPLS Networks
- Co-Location
- Managed Hosting
- SIP Trunks (MiLine)

Our Internet Service solutions cater for all sizes of company, from SMEs to larger corporate organisations.

DWM are entirely independent, which allows products and services from multiple network operators to be selected in order to provide the best combination of service and price.

Using a consultative approach, DWM is able to deliver customised Internet Service solutions, which provide the best match for our customer's requirements.

DWM provides the option of fully managed solutions, incorporating pro-active monitoring of the network on a 24x7x365 basis.



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- IP-VPN
- MPLS Networks
- Co-Location
- Managed Hosting
- SIP Trunks (MiLine)



All the team at DWM were helpful and willing to support. They went out of their way to ensure we were fully informed of progress at each stage. I look forward to working with DWM on our next development.

*Greenwich Primary Care Collaborative*

- Voice over IP
- Private Branch Exchange
- Hosted
- Mobile Telephony



The preceding surveys had the usual attention to detail. It was this preparation, good planning and a thorough system of communication with us that ensured all of the installations ran smoothly.

*Queens Park Academy*

## TELEPHONY

Companies and organisations in both the private and public sector are now beginning to embrace telecommunications technology in its various guises. For many organisations finding a solution that fits their business or organisation model can be perplexing.

“VoIP” or “Voice over IP” Telephony is quickly replacing traditional PBX systems as the most effective form of distributing and managing voice transfer within the workplace.

VoIP Telephony provides a way for you to extend consistent voice communications services between personnel within organisations. Whether they are in main campus locations, at branch offices, working remotely, or via the mobile. VoIP Telephony transmits voice communications over the network using open-standards-based Internet Protocol.

Using the network as the platform, VoIP Telephony solutions help organisations of all sizes realise greater security, resilience, and scalability. A well tailored VoIP Telephony solution can further support video, data and mobile applications in addition to basic voice distribution. VoIP Telephony products also support a wide range of “SIP” based capabilities “Session Initiation Protocol”.

Where appropriate your organisation may also consider utilising hosted PBX or VoIP solutions. With the internet seemingly dominating our day to day function and IP based communications products superseding traditional technology it is paving the way for hosted voice solutions to prove a reliable and a cost effective alternative for many business types. These solutions can often represent a sensible route to fulfil immediate telephony requirements without the need for large capital investment.

DWM continue to design, implement and support VoIP, PBX, Hosted and Mobile Telephony solutions throughout the UK as part of a well consulted and designed solution. We are open vendor and not biased to any technology vertical choosing to understand the environment and the requirement prior to providing a solution to fit. Voice transfer remains one of the most powerful and critical business operations, if designed and deployed correctly it should increase productivity and maximise investment assurance.





## AUDIO VISUAL

DWM will analyse every client's needs, regardless of size, and choose the best hardware and systems that will meet their requirements.

DWM pay close attention to environmental, regulatory, and budgetary issues, while keeping a close watch on project timelines.

DWM helps you select the best products from quality-focused manufacturers and then integrates those products according to design specifications.

When all this technology comes together it will allow ease of functional access, provide high presentation impact with collaboration (system adaptation), and become a fully "Integrated System."

DWM retains a complete, full-time engineering staff, utilising the latest technology in computer-aided design capabilities. Our engineers create a detailed model of the area you wish to equip. These designs ensure you are getting exactly what you want, where you want it. We keep all of our client's documentation archived for future reference.

Our reliable and flexible programming team take the time to deliver an interface that is clear, concise, and designed for ease of use by non-technical personnel. They pride themselves in the ability to satisfy a customer's needs from concept to completion and are fully certified at the highest level set by the manufacturers.

- Digital Displays
- Digital Signage
- Interactive Displays
- PA Audio Systems
- Video Conferencing
- Control Systems



DWM have been working with us for a number of years and their performance has been excellent. Coupled with a first class customer service record they come highly recommended by us.

Shepherd Group



# Security Systems

- Door Access Control
- CCTV



It was apparent that DWM were focused and pro-active in supplying a bespoke solution to meet our scope, and provided expert knowledge working with leading high quality CCTV equipment and software. Their unique approach included a very detailed site survey and on-site demonstration of what a finished system could offer. This was an area that other providers failed to address.

3M

## SECURITY SYSTEMS

DWM specialise in the design, supply, installation and integration of IP Security technology systems.

All of our security designs are implemented via a correctly designed and robust network platform in an aim to provide optimum control, management, performance and statistical analytics.

DWM have twinned with only the best of breed manufactures to ensure our IP Security products are at the most cutting edge of technology.

DWM specialise in the following areas of IP Security

- IP Door Access Control
- IP CCTV

Our IP based security ethos is to integrate these applications via the local and wide area network to allow our designs to provide organisations centralised management of permissions, and to allow complete and personalised user rights access from multiple sites and user devices that can be located anywhere around the world.

Our IP Security solutions are designed, installed and maintained by both our IT and Security Division specialists to offer our clients absolute security, visibility, control and scalability.



## AIR CONDITIONING

DWM Technical Solutions Ltd offer a full design, installation and maintenance service; supplying energy efficient air source heat pump air conditioning units for many environments including Offices, Server Rooms, Boardrooms, Schools, Health Centres and many more.

DWM are vendor neutral, choosing to select the best manufacturer product for each bespoke solution. DWM offer a full design service utilising innovative heat and humidity load calculation software to ensure that each solution operates at maximum efficiency and offers the best value for money.

Our specific knowledge of Data Centres allows us to consider many options to meet with our client's budget and performance requirements.

This, coupled with our other in house departments, allows us to undertake and complete Server Room/Data Centre design and installation to an extremely high standard, with the minimum of disruption and involvement from the Client.

Our team will consider humidity, monitoring, airflow and airflow management, rack cooling, load arrangement, load expansion and redundancy.

We have extensive knowledge in Computer Room Air Conditioners (CRAC), Computer Room Air Handling (CRAH), Humidifiers, Chillers and Cold Aisle/Hot Aisle Design. We always consider the key principles of Data Centre cooling - air delivery, movement and heat rejection as part of any solution.

Our Air Conditioning services include:

- Free Surveys and Consultancy
- Energy Assessments to TM44 and certification
- Installation of new energy efficient heat pump systems
- Two hour response - 24 Hour Emergency Callouts
- Planned preventative maintenance and servicing
- Bespoke Service Level Agreements



- Air Conditioners
- Air Handling
- Humidifiers
- Chillers
- Cold & Hot Aisle



I would like to extend our gratitude for the refreshingly professional approach taken during our recent Server Room migration and all the associated work elements undertaken and completed by DWM.

*Amethyst Group*

# IT Furniture

- Benching
- Lecterns
- AV Furniture
- PC/Tablet Stands and Enclosures
- Seating



DWM Constantly provide a reliable, quality and attentive service and often exceed our expectations. We would, and do, recommend them to other Schools.

*Putnoe Primary School*

## IT FURNITURE

DWM supply and install high quality bespoke IT furniture specifically targeted for educational and commercial environments.

We can provide one off items or complete solutions, depending upon your requirements. All items are made to order with your exact requirements in mind.

We regularly work with Head Teachers, ICT Managers and Design Consultants to transform spaces to offer unique, organised and attractive works spaces. Also by twinning with our IT Services Division we also offer unique housings and displays for our peripheral IT hardware offerings.

DWM use only quality natural wood veneers or high grade manmade finishes such as wood effect melamine and high pressure laminates. We aim to ensure that the materials we use age sympathetically to their environments and continue to provide professional areas for working. Combining these materials with well engineered fittings, we can provide solutions with excellent long term durability, in distinctive designs with superb ergonomic performance.

Our service is founded on quality - with our initial free of charge survey, thorough planning processes and comprehensive layout and 3D drawing designs, we can ensure that you will get your precise requirements, produced as competitively as possible - with the minimum of disruption to staff and pupils.



## CLIENT LIST

3M Health Care Limited  
 Adoption Plus  
 Alzheimer's Society  
 Amethyst Group Ltd  
 BBA Aviation PLC  
 Bedford Borough Council  
 Bedford College  
 Bedford School  
 Bedfordshire Police  
 Bishop Stopford School  
 British Airways  
 British Gas Energy Services Ltd  
 Burger King  
 Cable & Wireless UK  
 Caffe Nero  
 Calor Gas Limited  
 Carington Estates  
 Central Pharma  
 Corby Business Academy  
 Easyjet Plc  
 England Athletics Ltd  
 European Electronique  
 Exeter College  
 Futures Community College  
 Geoffrey Osborne Limited  
 Goldington & Putnoe Children's Centre  
 Harris Manchester College  
 Harrods Aviation  
 HF Trust Limited  
 Holmesdale Building Society  
 Hotel Chocolat Retail Ltd  
 JC Decaux UK Ltd  
 Lady Margaret School  
 Lloyds Trade Union  
 London Luton Airport  
 Mansfield College  
 Menzies Aviation UK Limited  
 Milton Keynes Council  
 Mitie Technical Facilities Management Ltd  
 MotorSport Vision Ltd  
 National Express UK Limited  
 NHS Greenwich PCT  
 NHS Lambeth PCT  
 Palmer Sport  
 Parripak Ltd  
 Philex Electronics Ltd  
 Putnoe Primary School  
 Queens Park Academy  
 Reaseheath College  
 Renshaw UK Ltd  
 Robert Half Limited  
 Ryanair Limited  
 Ryebriidge Ltd  
 Shepherd FM  
 Signature Flight Support  
 Spring Studios  
 Stagecoach  
 St Peters College  
 The Bedford Charity  
 Tie Rack Trading Limited  
 Trinity Construction Services Ltd  
 University of Oxford  
 Wadham College  
 West Hatch High School  
 Westminster School  
 WHSmith Travel Systems  
 Worcester College of Technology  
 Wyboston Lakes Limited  
 XMA Limited



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# Case Study

## The Customer

The Rugby Football Union is the national governing body for grassroots and elite rugby in England, with 2000 autonomous clubs in its membership. Twickenham Stadium is the home of England rugby. Seating 82,000 spectators, Twickenham is the largest dedicated rugby union venue in the world.



It was important for us to move forward with technology and enable our players to have top of the range feedback ...

*The Rugby Football Union*

## Objectives

In conjunction with Shepherd Group (Shepherd Interiors) DWM were required to design, supply and install a new sound system and standalone Audio Visual solution for the RFU at Twickenham Stadium Changing Rooms.

## Solution

During summer 2013, the RFU commissioned SES, Shepherd Engineering Services (division of Shepherd Group), to be the main contractor on a new project at the prestigious Twickenham Stadium. DWM were selected to consult, refine and finalise the pre-determined Audio Visual package as a specialist AV installer. Our preferred design included for an integrated sound and audio visual platform via a centralised matrix system, however, unfortunately although preferred by all parties, finances proved a stumbling block and DWM were asked to value engineer the design to meet with available project budget. Following much consultancy where budget and technology options were discussed, it was agreed that the following independent solutions would be deployed.

An Independent amplified Sound System incorporating Wifi and Bluetooth streaming capabilities would be deployed with particular focus on sound output and quality to ensure the system could deliver the requested pre-game motivation. The speakers and sub would be required to be ceiling mounted to provide minimal appearance and away from any potential water hazards. DWM delivered a solution of exceptional sound quality and utilised a community distribution ceiling mount sub and speaker solution to provide the aesthetically pleasing look required.

The Audio/Visual requirements would be met via both interactive large format displays and non-interactive displays supplied from multiple control locations. The Standalone control to screen solution would encompass 5 x LCD displays and 2 x Large format Interactive displays incorporating 6 x control positions.



Twickenham Stadium

## Impact

Through the implementation of this system, DWM have been able to ensure a high quality sound system that delivers superior quality sound to the Home Changing Room area and Home Changing Room Entrance/Exit Corridor.

The large format interactive display screen installed into the main changing room area and a further interactive display to the Analyst's area enables screens to be controlled and utilised locally, in addition to being controlled independently from the Analyst's area. The further display screens deployed in both the Home and Away Changing areas allows more isolated review of pre-edited footage.

For both the sound system and Audio Visual installations our design team were required to work closely with the fabric fit-out installer to ensure all screens and ceiling mount speakers could be integrated into the Changing Room fabric in a seamless manner. The end results would always be to provide optimum technology delivery in a minimal manner. Our design and installation team were also required to deliver the solution as part of vastly accelerated works programme to enable the facilities to be delivered for RFU usage for the pre-scheduled Autumn International games.

## Ongoing Relationship and Support

Having previously worked closely together, DWM Technical Solutions have an existing relationship with Shepherd Group and as a result Shepherd Interiors asked DWM to work on this project. Mark Reeves, DWM Electrical Manager said,

"It was great to be involved in working at such a prestigious sports ground. With the way technology has advanced over the years, our install has given the stadium an amazing sound system and the players a great opportunity to improve their game in ways that just weren't possible in years before. The upgrade provides England with another edge in anticipation of the up and coming 2015 world cup. To be part of any England success makes us immensely proud."

## Testimonials and References

DWM carried out the project within short timescales and delivered the Sound System and Audio Visual platform on target, allowing us to take time to handover the solution to key RFU personnel in advance of the Autumn Internationals. We have received great feedback about the solution and its usage throughout the Autumn International success. The Home and Away changing rooms have received their fantastic facelift and now have a modern and top of the range AV and sound system solution.

A spokesperson from the RFU said "It was important for us to move forward with technology and enable our players to have top of the range feedback. By committing to this project we want players to be able to review game footage; advise on team tactics and have a general overview of play."

Rik Atkinson, Project Manager, Shepherd FM said "DWM have been working with Shepherd Interiors for a number of years now and their performance with regard to Data, AV and electrical design and installation work has been excellent. Coupled with a first class customer service record, they come highly recommended by us."

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*Shepherd FM*

AVIGILON



**molex**  
one company > a world of innovation



**HellermannTyton**



**excel**  
without compromise.

**ENERGY EFFICIENCY  
IN BUSINESS**



**SMART.**

# **DWM Technical Solutions Ltd**



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