D-STAR Statistics

- Over 1700 Users Active Each Day
- Over 11,000 Registered Users
- Over 550 Repeater Systems

Inside this issue:

Welcome to D-STAR Info
We're All About D-STAR

Welcome back to the next edition of the D-STAR Info Newsletter. This month's centerfold contains a complete listing of D-STAR Reflectors and D-STAR Nets. Complete listings are available from www.DSTARInfo.com.

There is a lot happening across the country and around the world with D-STAR, but we can't share it without your help. If you have D-STAR news in your area, a special operating event or can contribute some D-STAR knowledge and tips to other users, please let us know.

As always, your feedback is encouraged. Please send your news stories, photos, D-STAR tips and anything else D-STAR to us at info@DSTARInfo.com.

And visit www.DSTARInfo.com

DV Access Point Dongle Announced

Something new has just been released into the world of D-STAR. The DV Access Point Dongle, released in January by Internet Labs, provides a way to connect to the international D-STAR network. Like their current product, the DV Dongle, the DV Access Point Dongle (DVAP for short) is used with a PC/Mac and an Internet connection. Unlike the DV Dongle, the new product allows Amateur Radio operators to walk away from the computer and transmit/receive D-STAR voice and data using a two meter D-STAR radio.

Both the translucent blue DV Dongle and the new red DV Access Point Dongle plug into a USB port on a PC running Windows XP/Vista/7 or Linux, or an Intel based Mac running Mac OS X. The DVTool software (for the DV Dongle) and the DVAPTool software (for the DVAP) connect to the D-STAR network using an Internet connection. Users may connect to hundreds of D-STAR gateways or reflectors and communicate with other Amateur Radio operators from around the world. Both voice and data modes of D-STAR are supported.

The DVAP is basically a GMSK modem with a two meter transceiver built in. GMSK (or Gaussian Minimum Shift Keying) is the protocol used by D-STAR for the RF portion of the network. GMSK is probably best known for use in GSM cellular networks. Using the DVAP hardware designed by Moe Wheatley (AE4JY) and DVAPTool software designed by Robin Cutshaw (AA4RC), the frequency agile DVAP is tuned to frequencies between 144 and 148 MHz in IARU regions 2 and 3, and 144 to 146 MHz in region 1. Once the device is opened in DVAPTool, the Amateur operator may then walk away from the computer and control the software using a D-STAR radio such as an Icom IC-80/91/92 HT. The DVAP has a maximum power output of about 10 dBm (or 10 milliwatts). This gives the unit a range of about 100 yards/meters using the included SMA based antenna. It is possible to extend the range using an outside antenna. The DVAP is designed for use around the house, yard, and neighborhood.

Current users of gateway connected D-STAR repeater systems will feel right at home with control of the DVAP. Similar to controlling gateway based dplus software written by Robin Cutshaw (AA4RC), control commands are issued from a D-STAR radio using the URCALL field. Set the URCALL field to "DVAP   I" for voice response device information, "DVAP   E" for echo test, and "REF001CL" or "   U" to link/unlink to reflector 001 module C (for example). Once connected to a gateway or reflector, use "CQCQCQ " to communicate with users on the target system.

The DV Access Point Dongle is commercially available through Amateur Radio stores in the US and will soon be available in the EU. Note that a D-STAR radio is required to communicate with the DVAP and an Internet connection is required to communicate with the D-STAR network.

D-STAR for Everyone!

Been looking for an easy way to climb aboard the D-STAR express? Let the new IC-80AD and ID-880H be your tickets to ride! With an improved user interface, smart new look, and free programming software included you can't go wrong!

Get on track and join in on the D-STAR fun today!

3G D-STAR

NEW IC-80AD

THIRD GENERATION 2M/70CM DUAL BANDER

- 5/2.5/.5/.1 Watt 2m/70cm
- AM, FM, WFM
- RX: 0.495-999.990MHz**
- Improved User Interface
- Li-Ion Power
- **Free Programming Software!***

www.icomamerica.com/amateur/DSTAR
for details about free software

NEW ID-880H

VERSATILE 2M/70CM DUAL BAND MOBILE

- 50 Watt/VHF/UHF
- AM, FM, DV
- RX: 118-999.99MHz**
- 800 Alphanumeric Memory Channels
- **Free Programming Software!***

3G D-STAR

www.icomamerica.com/amateur/DSTAR
for details about free software

No matter where you go.

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Notes from the Trust Server Team - Gateway Installations
Brian Roode NJ6N

The Trust Server, also known as US Root, is the system that ties all of the individual D-STAR gateways around the world into a tightly integrated system of repeaters. The Trust Server software started out running the same Icom G2 code that all of the gateway systems run, but the software has evolved over time into a specialized version. New gateway admins are often confused about where to start when it comes to installing and configuring the CentOS Linux based computer system for their gateway. One of the first documents that a new gateway administrator should read, besides the Icom G2 installation instruction is the "Joining the Network" guide that is found on the DStarUsers.org web site:

http://dsyncg2.dstarusers.org/JoiningTheNetwork3.pdf

Another good resource for Gateway administrators is the "D-STAR G2 Scripts & Utilities" web site found here:

http://dsyncg2.dstarusers.org/info/

After the Icom G2 software installation has been completed, there are three updates that need to be applied to the gateway software. Important "port forwarding" configuration changes must be made in the D-STAR gateways network router. Information on how to install the updates, what ports to forward, and how to test that you've got your ports forwarded correctly can be found in the guide mention above.

By far, the most common mistake new administrators make is entering their internet routers MAC address using colons (00:12:34:A1:B2:C3) instead of dashes (00-12-34-A1-B2-C3).

Once you've got your gateway installed and working, make sure you request to join the "D-STAR_Admins" Yahoo group by sending email to D-STAR_Admins-subscribe@yahoogroups.com
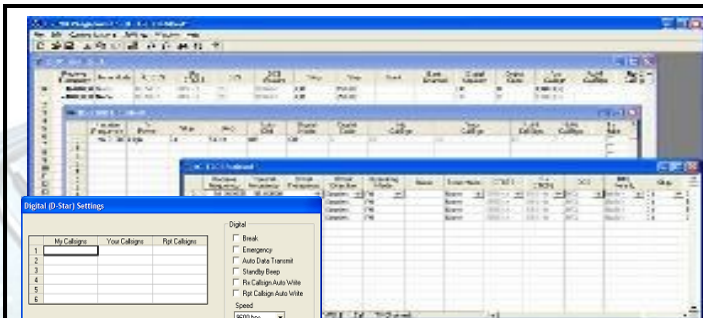
This is an exclusive group for Gateway administrators for the purposes of conveying important information about the US-Root D-STAR network. When requesting to be added, please let us know which gateway you are the administrator for. The "DStar-Gateway" Yahoo group is a group for general discussion of D-STAR Gateway administration. To subscribe, send email requests to: DStar-Gateway-subscribe@yahoogroups.com

Gateway owners should also register and maintain their repeater frequency and location information in the D-STAR Repeater Directory:

http://dstarusers.org/repeaters.php

(as well as www.DSTARInfo.com/update   Editors note)

Questions about joining the network can be sent to the Trust Server Admins at: Trust-Server-Admins@dstarusers.org.

D-STAR Continues to Grow

D-STAR continues to experience tremendous growth increasing from around 10,000 registered users in Oct, 2009 to over 11,000 in three months.

Registered D-STAR Users—Courtesy of DStarUsers.org
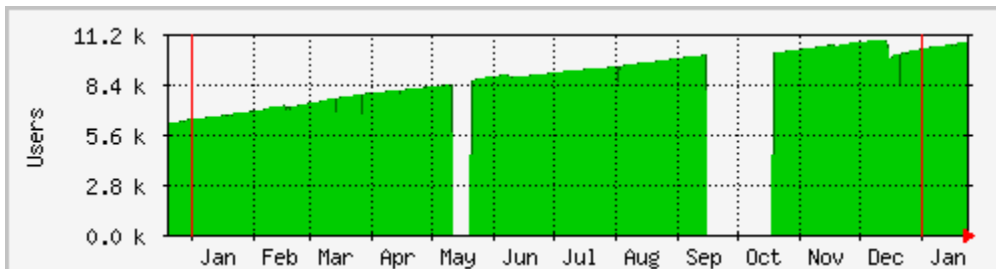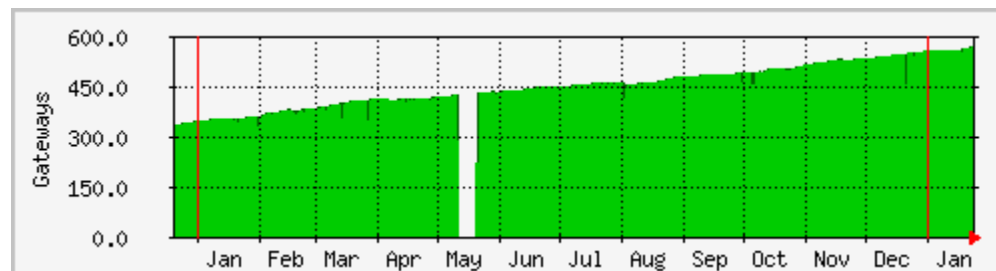

D-STAR Continues to Grow

The number of D-STAR Gateways has also grown from around 520 systems to 565 in the last three months. Each Gateway may have from one to four repeaters connected.

Registered D-STAR Gateways (multiple repeaters are usually registered under one gateway)

www.DSTARInfo.com

D-STAR Nets

23 January 2010

Weekday	Local	TZ	UTC	Description	Location
Sunday	9:30	PST	15:30	BCSF Net	K6MDD C VA7ICMC
Sunday	19:00	PST	3:00	Federal Way Amateur Radio Club	REF001B
Sunday	19:00	EST	0:00	National Capital Region Net	REF025C
Sunday	20:00	CST	2:00	Texas Interconnect Team Net	K5TIT
Sunday	20:00	CST	2:00	Ozark Mtn D-STAR Net	REF001C
Sunday	20:00	EST	1:00	Buckeye D-STAR Net	W8DIG C
Sunday	20:00	PST	4:00	BC to SF Net	REF014A
Sunday	21:00	EST	2:00	Southeastern D-STAR Weather Net	REF002A
Monday	20:00	EST	1:00	DV Weekly D-STAR Net	K3PDR
Monday	20:30	EST	1:30	Gwinnett County (GA) D-STAR Users Net	WD4STRB
Tuesday	19:00	EST	0:00	Toronto ARES Net	VE3WIKC
Tuesday	19:00	EST	0:00	EPA, NJ, NY Regional EmComm Net	REF020A
Tuesday	19:30	CST	1:30	Huntsville D-STAR Net	KI4PPFC
Tuesday	20:00	CST	2:00	Texas D-STAR Net	REF004A
Tuesday	20:00	PST	4:00	Independent Radio Club Net	WA6IRCC
Tuesday	20:00	PST	4:00	San Diego D-STAR Tech	REF012B
Tuesday	20:00	MST	3:00	Colorado D-STAR Net	W0CDS B
Tuesday	20:30	EST	1:30	Tri-State Amateur D-STAR Net	REF001C
Tuesday	20:30	CST	2:30	Birmingham Amateur Radio Club D-STAR Net	REF002B
Tuesday	21:00	EST	2:00	Greensboro NC Amateur Radio Association Net	W4GSO B
Tuesday	21:00	EST	2:00	North Carolina D-STAR Net	REF017C
Tuesday	21:30	WET	20:30	Dutch Speaking D-STAR Net	REF017A
Wednesday	20:00	PST	3:00	Los Angeles D-STAR Nets	REF012B
Wednesday	20:00	PST	4:00	The Puget Sound D-STAR Roundtable	WD7STRB
Wednesday	20:00	CST	2:00	Illinois State D-STAR Net	REF001A
Wednesday	20:00	GMT	20:00	London D-STAR Net	GB7OK
Wednesday	20:30	EST	1:30	Indiana State D-STAR Net	W9ARP B W9ICE B
Wednesday	20:30	CST	2:30	Tuscaloosa Tall Tower D-STAR Net	REF002B
Wednesday	21:00	EST	2:00	Florida State-Wide D-STAR DV Net	REF004B
Thursday	19:00	PST	3:00	W6DHS Global Village Net	REF001C
Thursday	19:30	EST	0:30	Stafford Amateur Radio Association	WS4VAC N4USI C
Thursday	19:30	CST	1:30	East Alabama D-STAR Net	WB4GNAC
Thursday	19:45	EST	0:45	Malfunction Junction ARC - SC DSTAR	KJ4BWKC
Thursday	20:00	EST	1:00	EMDRC D-STAR Net	REF003C
Thursday	20:30	EST	1:30	North Carolina D-STAR Net	REF017C
Friday	21:00	EST	2:00	Canadian D-STAR Net	REF016B
Saturday	18:00	CEST	16:00	Italian Language Net	REF007A

This is a listing of the D-STAR Nets and Reflectors as of 23 Jan 2010 from the www.DSTARInfo.com database.
There may be systems or nets that are on the air that are not on this list. We strive to keep this list as up to data as possible. If you find an error, please notify us at info@DSTARInfo.com.
If you are a repeater administrator and would like to update your repeater information, please check out www.DSTARInfo.com/update for instructions. While it would be nice if there was only one database, there currently are two that we know of, one at www.DSTARInfo.com and the other at www.DSTARUSERS.org. Please keep both databases up to date with any changes.

www.DSTARInfo.com

D-STAR Reflectors

23 January 2010

Reflector	Usage A Reflector	Usage B Reflector	Usage C Reflector	Location	Speed
REF001		Some Nets	D-STAR's MegaRepeater	Aurora Illinois, USA	100 Mbps
REF002	Southeastern US D-STAR Weather Net	Some Nets	Some Nets,	Nebraska, USA	100 Mbps
REF003	Ad-hock & Emergency Use Australia	Permalink for Repeaters, including all WIA Port B Repeaters – Australia	Australian Nets	Australia	
REF004	Alternate for Southeastern US D-STAR Weather Net	Texas Permalink Repeaters		USA	
REF005	UK Nets, Permalink Repeaters	French Language - Swiss and French users		London, England	100 Mbps
REF006	Scottish Net	Denmark, Sweden, and Norway Repeaters	German Net	London, England	100 Mbps
REF007				Italy	
REF008		Italian repeaters 8PM to 11 PM Local and all weekend		Italy	
REF009			Arizona Permalink Repeaters	Arizona, USA	
REF010	Emergency Communications	Open	New England Repeaters	New England, USA	100 Mbps
REF011				Italy	
REF012	Permalink Repeaters			Southern California, USA	100 Mbps
REF013				London, England	100 Mbps
REF014	US west coast repeater linking	US west coast repeater linking	US west coast repeater linking	Nevada, USA	
REF015	Multimedia (non-DSTAR)	Multimedia (non-DSTAR)	Data Only - Worldwide use	London, England	
REF016				British Columbia, Canada	100 Mbps
REF017	Repeaters and hotspots in the Netherlands	Dutch-speaking Belgian repeaters and hotspots in Flanders	French speaking Belgian repeaters in Wallonia North Carolina Nets	Amsterdam, the Netherlands	100 Mbps
REF018	Brazil	Brazil	Brazil	USA	
REF019				Wisconsin, USA	100 Mbps
REF020				New Jersey, USA	
REF021	Wales and the West Country	Midstar / Midlands		London, England	1 Gbps
REF022	Nordic region Finnish	Nordic region - Swedish/Danish/ Norwegian	Nordic region English/other activity	Espoo, Finland	1 Gbps
REF023				Australia	
REF024	Michigan ARES	General Use	General Use	USA	100 Mbps
REF025	Public Service Skywarn & Emergency Use	National Capital Region Association Permalink	General Usage Sunday Night NCR Net	Washington, DC, USA	100 Mbps
REF026	Vancouver 2010 Olympic Games 1	Vancouver 2010 Olympic Games 2	Provincial Emergency Radio Communications	Vancouver, BC, Canada	1 Gbps
REF027	Italy			Italy	
REF028	Flemish language (Flemish/ Dutch-speaking Belgian repeaters and hotspots in Flanders area)	French language (French-speaking Belgian repeaters and hotspots in Wallonia area)	Slow data (D-STAR TV, D-Rats...)	Netherlands	100 Mbps
REF030	Atlanta Area A Modules		Atlanta Area Repeaters	Duluth, GA, USA	1 Gbps

www.DSTARInfo.com

PAPA's D-STAR
Larry Calvin, N9QE

The PAPA System (Pocket Auto Patch Association) is a member supported organization with 300 radio amateur members throughout the Southern California region. The members are supporting 14 analog linked repeaters and 10 digital voice/digital data D-STAR repeaters providing coverage from the Mexico border north to Santa Barbara and from the Arizona border to the Pacific Ocean.

In late 2006, Robert (K6RCK) conducted a D-STAR presentation at a PAPA breakfast meeting proposing that the PAPA System consider deploying D-STAR repeaters for its members. Tim Barrett (K6BIV) with K6MDD Mount Diablo D-STAR System was invited to talk to the group and provide his recommendations. After Tim's presentation, Robert (K6RCK), Ed (W6ONT), Cecil (WD6FZA) and Leo (WB6YES) all agreed to install the first PAPA System digital voice repeater in the Los Angeles area. In early 2007, the membership began experimenting with the new D-STAR digital technology from Icom.

The Saddle Peak KF6BQK Repeater was first installed in June 2007. The site overlooks Malibu at 2800 feet elevation and provides coverage for Los Angeles, Santa Monica, West San Fernando Valley, Catalina Island and South Coast locations.

This site provides members with both 70 centimeters and 1.2 GHz digital voice and digital data communication. A DSL telephone link for gateway access was completed prior to the ARRL Southwest Division Convention in Torrance, California during the summer of 2007.

The Oat Mountain KI6JKA Repeater was installed in November 2007 at an elevation of 3700 feet and provides coverage throughout the San Fernando, Santa Clarita Valley areas with extended coverage in Los Angeles, Orange, and Oxnard Counties.

Special thanks to Don (WB5EKU) for converting his analog repeater frequency pair to the new digital D-STAR repeater and Robert (K6RCK) for procuring the D-STAR equipment for the Oat Mountain Site.- The gateway access is provided by a DSL telephone link to the site.

The Palomar Mountain KI6MGN Repeater went operational in November 2007 in the San Diego area at an elevation of 5300 feet. The KI6MGN repeater provides both two meters and 70 centimeters coverage from Escondido South along I-15 to the Mexican Border.

The Mount Otay KW6HRO Repeater was installed in March 2008. Located near the California/Mexico border at an elevation of 3500 feet, the KW6HRO repeater provides 70 centimeter and 1.2 GHz digital voice and digital data coverage throughout the City of San Diego with extended coverage along the coast to San Clemente.

The Mount Otay D-STAR repeater gateway uses a 5.8 GHz backbone radio link for gateway access. The members engineered a 21 mile radio link with a 6 to 8 Mbps data rate from the mountain top to the data center where Reflector 12 is located. Many challenges were overcome by the design and installation team to establish this radio link. We specially want to thank John (W9EN) for his hard work in obtaining the 5.8 GHz radio link system that made the gateway access possible.

Oat Mountain KI6JKA Repeater with Cecil WD6FZA

The Mount Woodson Digital 15 (D15) KI6KQU Repeater was installed in October 2008. The Mt. Woodson Site is centrally located in San Diego County at an elevation of 2800 feet and provides 70 centimeter coverage throughout San Diego County area. The repeater gateway utilizes a Wireless Internet Service Provider (WISP) that accommodates internet access to the system. Special thanks to Doug (K6DAF) for making a generous contribution towards the procurement of the Mount Woodson D-STAR equipment!

Reflector 12 went operational on October 20th 2008 and is located in the San Diego area. The reflector is hosted by Richard (KF6MCD) at his data center and has a high bandwidth capacity. This is also where the 5.8 GHz backbone link from Mount Otay receives its internet service.

One of the biggest challenges is to obtain new repeater frequency pairs in a highly congested metropolitan region like Southern California. Cecil (WD6FZA) took on this challenge to maintain their coordinated FM repeater pairs and find new frequency pairs for the D-STAR repeaters. With Cecil's hard work working with the general amateur radio community, the new frequency pairs were located and coordinated with the Southern California coordinating bodies and the PAPA D-STAR System was achieved.

The PAPA System is currently hosting two D-STAR Nets on Tuesday and Wednesday nights on Reflector 12, Module B at 8:00 pm local time. The Tuesday night San Diego Tech Net is hosted by KC (KC6B) in San Diego. The Wednesday night LA D-STAR Net is hosted by Larry (N9QE). Both nets welcome all D-STAR users to join the nets from around the world. Technical topics, guest speakers, radio programming and configurations are discussed along with other topics of interest. The San Diego PAPA System group hosts a local D-STAR luncheon and training class on the third Saturday of every month. Everyone is welcome to attend so if you're in San Diego area stop by and say hello.

Check out the PAPA System website at http://www.papasys.org for the latest information on our D-STAR and analog repeater systems, activities and events. The PAPA System D-STAR repeaters are available for its members and all licensed radio amateurs so please feel free to use them if you're in Southern California.

Calhoun County uses D-STAR
Randall Landers KG4EUD

The Calhoun County Alabama ARES/RACES Group operates D-STAR Emergency Communications for both ARES and RACES operations. The Alabama D-STAR community activates for severe weather and links to Reflector 002 Module B. The Central Alabama area is covered by a D-STAR repeater during a severe weather outbreak by linking the Tuscaloosa, Birmingham and Cheaha Mtn D-STAR Systems. The ARES groups and EMAs are in Contact with the Birmingham National Weather Service (K4NWS) requesting reports and live up-to-date information.

During the Annual CSEPP Chemical Stockpile Emergency Preparedness Program, the Calhoun County ARES/RACES Group is ground zero for the destruction of Chemical and Biological Weapons of Mass Destruction. Each year the Federal Government mandates the six county area conduct a exercise to prepare for an incident or accident at the Anniston ARMY Depot. FEMA/DHS, the ARMY, State of Alabama and local municipalities come together for this event. Randall Landers (KG4EUD) is the ARES DEC and Calhoun County EC responsible for preparing the Calhoun county area ready for the exercise. He assigns Amateurs with D-STAR, Analog, and HF through out the county to the three county hospitals, Joint Information Center, Simcell at the Anniston ARMY Depot, Decontamination area, Disaster scene, EMA and the Alabama Department of Homeland Security Emergency Communications Vehicle.

The group uses D-STAR and D-RATS to communicate through the area's two D-STAR systems. The EMA Group issues the Restrictive Area Descriptive System announcements and copies to D-RATS providing a hard copy in case of failure of the Emergency Alert System. They also announce which areas are to shelter in place or to evacuate.

The State EOC is also D-STAR equipped allowing ICS-213 forms and Radiograms to be sent. Four of the six CSEPP counties utilize D-STAR at the EMA offices. FEMA Region IV officials and evaluators have praised our ARES/RACES as one of the best working with CSEPP and the groups working and ability to handle adversities.

During this past year, the Alabama Hurricane D-STAR net was conducted from Calhoun County EMA (KD4CAL) linked up with eight D-STAR systems that covered from the Gulf Coast north to Huntsville including the State Capital in Montgomery and Alabama's largest city, Birmingham. ARRL Headquarters also participated in the D-STAR net on Reflector 002 Module B.

UK D-STAR Tweets
Darren Storer G7LWT

For those of you that "twitter", you can now follow the very latest D-STAR news online:
http://twitter.com/DStarUK
Recent tweets from the UK Interconnect Team (UK-IT) include up to the minute news about GB7NE and the long awaited DV Access Point (DVAP) from AA4RC.
Automated tweets, directly from D-STAR nodes, such as reflectors, are now in final testing and should be available soon.

Worthing connects with Amateur Radio enthusiasts worldwide
www.visitworthing.co.uk

Worthing Borough Council is the first Local Authority to host, in conjunction with Worthing & District Amateur Radio Club, a D-STAR repeater which allows communication through amateur radio and the internet anywhere in the world.

Worthing & District Amateur Radio Club already hold radio sessions for the public in the Council's Museum at weekends throughout the summer. Now, with the installation of their D-STAR repeater on Council property in the Town Centre, amateur radio enthusiasts using a simple handportable in the area can talk, free of charge, to other users anywhere in the world.

GB7MH – A Non-Icom G2 Repeater
David Lake G4ULF

My local Amateur Radio Club in Crawley, West Sussex, had been looking for a repeater site for some while. Finally, they found one – the bell tower of the highest church in southern England in a small village call Turners Hill.

I decided to try to convince the club that we should install a D-STAR repeater – the only problem was that we had no money. Radio site rentals are notoriously high in the UK, and we were very lucky in that the church were prepared to let us have access for £1/year.

So, I set about creating my own D-STAR repeater, built around the Satoshi Node Adapter project.

My plan was to build an Icom-compatible repeater around the board; in other words, I wanted users not to know that they were using a non-Icom repeater, having the same functions and features as a "real" system. In order to achieve this, my system would need to integrate with the K5TIT-run Trust Server, understand the G2 routing protocol and be able to host third-party applications such as D-Plus and D-STAR Monitor.

Based around a Mini-ITX system with a 4GB CF card and running CentOS 4, GB7MH went on-air in September 2009 using a Tait T800 repeater and a Satoshi Node Adapter running v4.48.1L code. Users can G2 route, D-Plus link and GPS/last-heard information is sent to dstarusers.org via D-STAR Monitor.

The antenna at the church is hidden inside the fibre-glass flagpole and the Internet connection is provided using a WiFi link from a router in the nearby church hall.

Keeping costs to a minimum, the Satoshi board cost around £50, the Mini ITX system less than £30, and the repeater was free, leaving just the cost of the antenna, duplexer and Internet link.

For more information on the project, please see the February 2010 edition of "RadCom", the RSGB magazine, or visit http://g4ulf.blogspot.com/

MB6AM, 2m D-STAR Simplex Node
www.77hz.com

After several weeks in testing, MB6AM went live Nov 2, sharing the same mast as the 70cm GB3TU repeater. MB6AM is located in Tring, North West of London and is well appointed to provide Digital Voice (DV) coverage across many of the Home Counties and parts of Oxfordshire.

MB6AM is the reincarnation of the old GB7AM packet node, using the same antenna and 2m frequency. Chris, G0WTZ, kindly donated his own Yaseu FT-7800R for the project and David, G4ULF provided custom software to link into the global D-STAR network. G4ULF's software was developed with the full cooperation of the Trust Server team and has been fully tested for G2 compatibility, with support for G2 direct routing and dplus linking across to other D-STAR repeaters, via the Internet.

MB6AM will be routinely connected to reflector REF013B which has been dubbed TechNet, a meeting place for repeater keepers, software developers and D-STAR hardware hackers. User control of dplus linking and unlinking is enabled, so mobile users on the busy M1 and M40 motorways, can re-task the simplex node as required. When the dplus connection is left unlinked, a script will automatically re-establish contact with TechNet.

D-STAR Tips and Tricks

Extending Internet to Repeater—Eric N6VYT

Here's some info on how our group was able to get internet from Visalia, CA to Kings Canyon National Park (K6VIS), a trip of over 50 miles line of sight. The complete system, linking both sites, was purchased at a cost of about $300.

The system was purchased from wlanparts.com The equipment is a Ubiquiti Bullet 5 kit with a 28 db grid parabolic dish on each end. More information on the Ubiquiti equipment can be found out at ubnt.com. Links going to two separate locations provide redundancy in the Internet connection.

If you have any Tips or Tricks, send them to Info@DSTARInfo.com