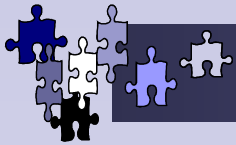







Jigsaw
M2M

**Internet Based Fuel Management
System**







Fuel Management Partners :

Production :

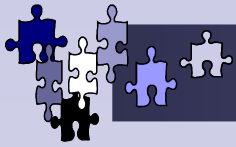
-  Fabrication – Almar, Preston
-  Electronic Circuit Board Production – NEO, Manchester
-  GSM Services – Orange, Vodaphone
-  Broadband – 02, Tiscali
-  Web Services - ThetaWave

Service and Installation :

-  SSL - Scotland
-  Camerons – England and Wales
-  Baltor – Northern Ireland
-  Blenheim Systems – Southern Ireland

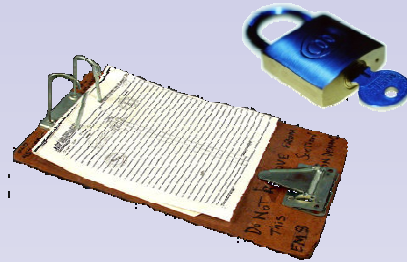
Associated Hardware :

-  Gilbarco Veeder Root – Tank Gauges
-  Dunraven Systems – Low Cost Radio Tank Gauge
-  GilbarcoVR, Hytek – Integrated Commercial Pumps



FM Generations

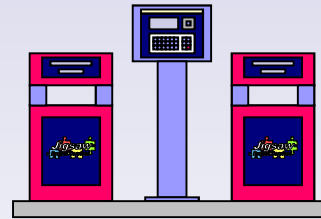
1st :



2nd :



All Reports from
Internal Printer



All fleet and
configuration
typed through
system keypad

3rd :



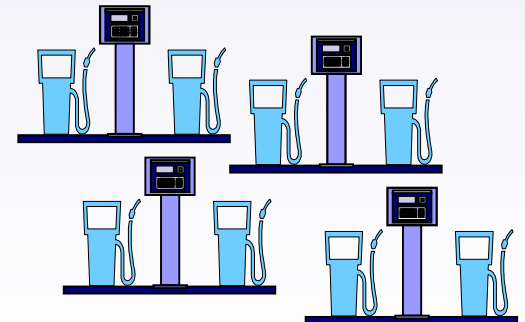
Fleet Owners PC
with FM Software

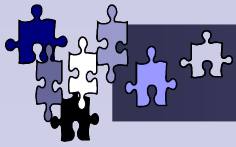


Fleet
Information

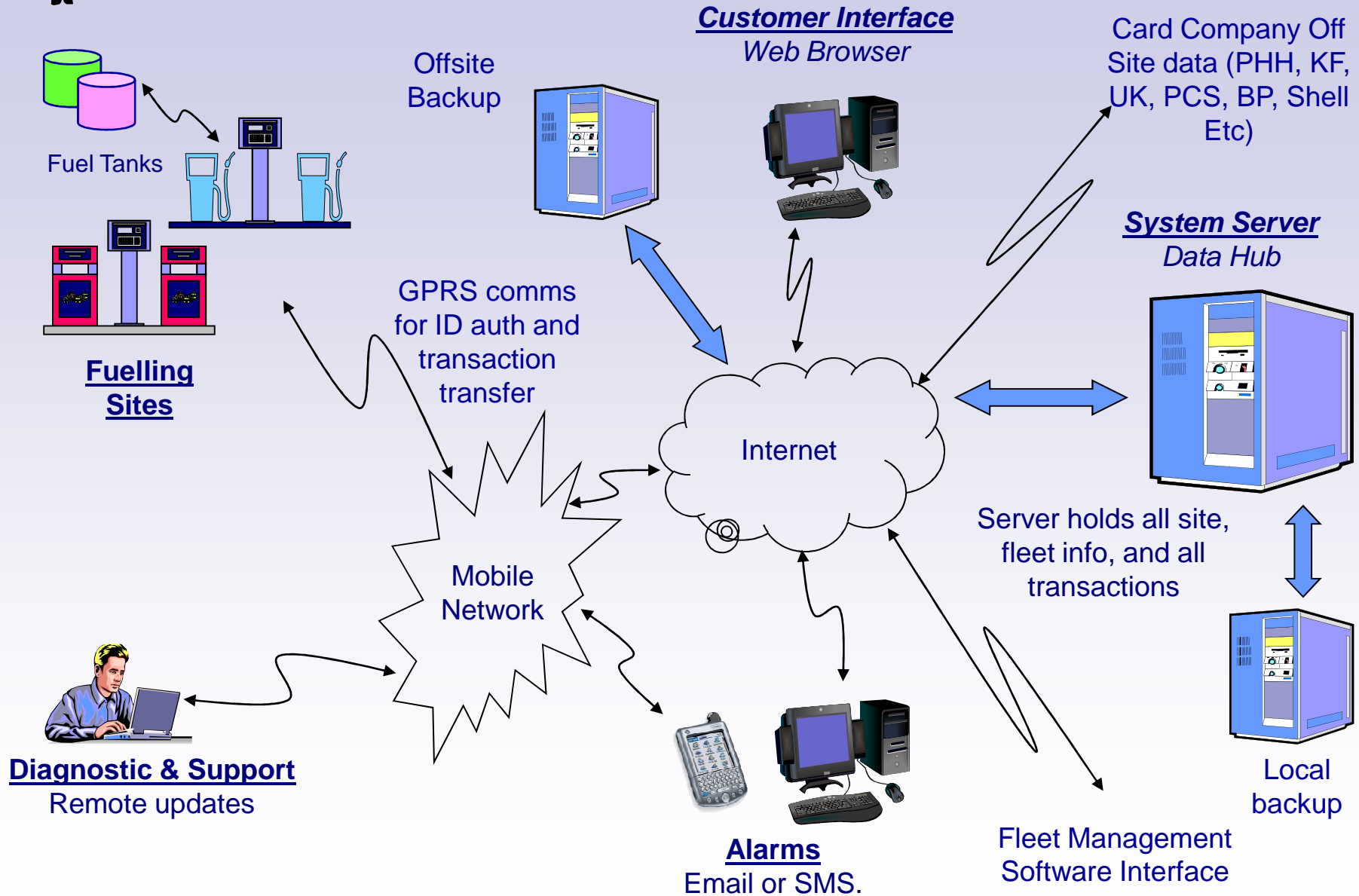


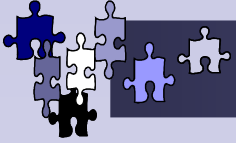
Fuelling
Transactions



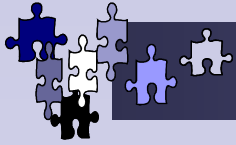


4GFM Overview



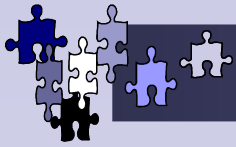


Site Terminal



Site Terminal Overview

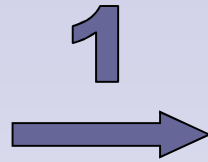
- ❏ Mobile GPRS for internet connectivity with fast, reliable OLA & OLS of transactions (typically 2-3seconds)
- ❏ Choice of Network providers & antenna to provide full geographical coverage
- ❏ Real time Automated Alarm reporting via SMS or Email
- ❏ Direct Connection using GSM dial in for remote data management & support
- ❏ Full Alpha Numeric Keypad for Complete data entry.
- ❏ Large Character 4 Line, Backlit Display
- ❏ Reliable Non Contact Tag Reader
- ❏ Integrated Tank Gauge solution
- ❏ Full System, Tank, Wall, Pump or Plinth mounted
- ❏ Integrated Pump Options
- ❏ Retrofit to existing systems can take as little as 15 minutes on site (system dependant)



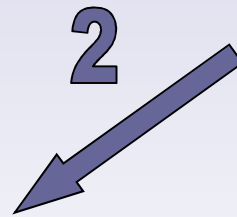
Retrofit to Merridale Auditor FC



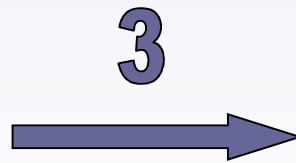
Original System



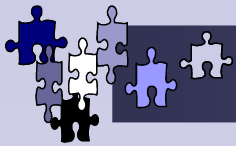
Remove Old Logic,
Printer and Door ...



Fit New Door, Connect
Looms and Fit Aerial ...



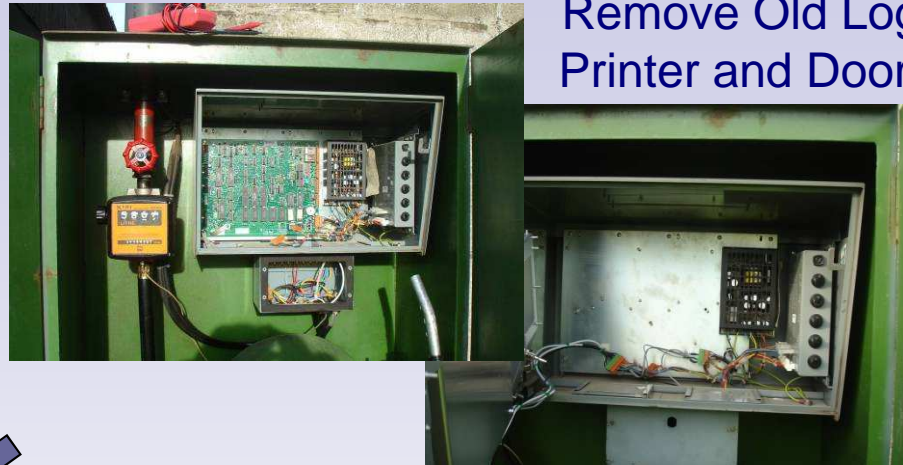
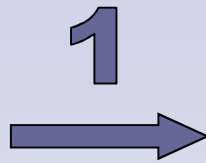
System Ready to Fuel
and on the web !



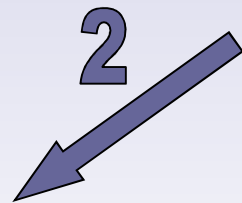
Retrofit to Triscan European



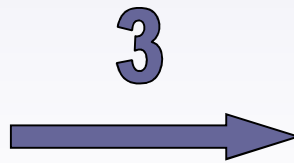
Original System



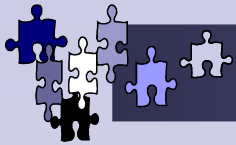
Remove Old Logic,
Printer and Door ...



Fit New Door, Connect
Looms and Fit Aerial ...



System Ready to Fuel
and on the web !



Timeplan Retrofit ...

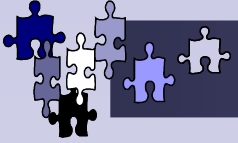


- Large Character, 4 Line Display
- High Reliability Keypad
- Complete Stainless Steel Door Cover for added security
- Dual Locks for added Security
- Internal option for Override Switches

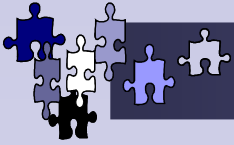


Typical Installs





www.protech-jigsaw.com



Accessing the Web Site

Log In To Jigsaw Online Fuel Management

User Name: Password:

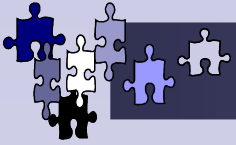


Jigsaw M2M develops products which gather on site information and then uses GPRS to pass that data to a web service.

Jigsaw has project roles ranging from consultancy, design and prototype right through to volume manufacture and support.

With over 40 years experience in electronic & software engineering Jigsaw M2M can offer a complete system solution.

The Jigsaw concept is to focus on our core skills, and work with



QuickView Screen

Jigsaw online fuel monitoring version 1.03. You are logged in as, jigsawdemo [Logout](#)

[QuickView](#) [Depots](#) [Vehicles](#) [Vehicle Groups](#) [Users](#) [User Groups](#) [Security](#) [Reports](#)

Fuel tanks at low stock level

Depot	Tank	Grade	Description	Low Level	Current Level
Demo Site	1	Diesel	Diesel Tank	2000	-17789.30

Fuel tanks at re-order stock level

Depot	Tank	Grade	Description	ReOrder Level	Current Level
Demo Site	2	Gas Oil	Gasoil Tank	5000	2778.10

Pumps out of service

All system pumps are currently in service.

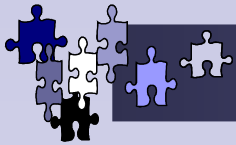
All depots



List all events

Recent system log events

There are no events available to list



Depots Screen

Jigsaw online fuel management version 1.06. You are logged in as. jigsawdemo [Logout](#)

[QuickView](#) [Depots](#) [Vehicles](#) [Vehicle Groups](#) [Users](#) [User Groups](#) [Administration](#) [Reports](#)

Select depot

Bloggs Haulage

Address

89, Tomkins Lane
Andigton Lea
Bramsing
NE6 6TU

Edit

Contact

Name:
Barry Bloggs
Phone:
01942 123456
Mobile:
07703 -123456
Email:
barry@bloggshaulage.com

Edit

Delete

New

Fuel storage tanks

Tank : 1
Description : Diesel Tank
Fuel Grade : Diesel
Capacity : 46000
Re-Order : 5000
Low Level : 2000
Current Level : 6407.30
T/Gauge Level : Not Installed
Unit Price : 1.18
Updated : 02/10/2008 18:51

Edit

<<

<

>

>>

Stock delivery

Stock adjustment

Pumps

Pump : 1
Hose : 1
Fuel Grade : Diesel
Lifetime Total : 346217.90
Period Total : 346217.90
PeriodStart : 27/06/2008 13:36
Updated: 02/10/2008 18:51

Edit

<<

<

>

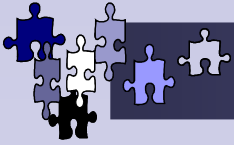
>>

Switch view >>

All pumps

Latest transaction records

Date/Time	Pump	Reg	Fleet	Odo	Qty	!
02/10/2008 18:47	2 Gas Oil	UNKNOWN	UNKNOWN	0	6.60	L
02/10/2008 18:35	1 Diesel	OP54 AYT	FLT0055	680136	K 211.20	L
02/10/2008 18:35	2 Gas Oil	OP54 AYT	FLT0055	0	64.80	L
02/10/2008 18:10	1 Diesel	UNKNOWN	UNKNOWN	461	180.10	L
02/10/2008 18:01	1 Diesel	OP54 AYP	FLT0054	735158	K 350.10	L

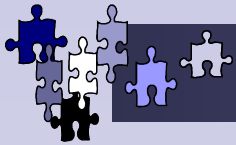


Vehicles Screen

Jigsaw online fuel monitoring version 1.03. You are logged in as, jigsawdemo [Logout](#)

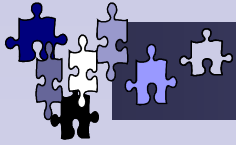
[QuickView](#) [Depots](#) [Vehicles](#) [Vehicle Groups](#) [Users](#) [User Groups](#) [Security](#) [Reports](#)

Search for	Veh. number	Reg.	Fleet	Home depot	Fleet Group	Vehicle Type	
Vehicle number <input type="text" value="0000300003"/>	0000300001	N1 EBY	FLT0001	Bloggs Haulage	Rapid Move Fleet	Car	View
<input type="button" value="Find"/>	0000300003	NH56 DMU	FLT0003	Bloggs Haulage	Rapid Move Fleet	Car	View
<input type="button" value="New"/>	0000300004	FP06 ZWT	FLT0004	Bloggs Haulage	Rapid Move Fleet	Car	View
Sort by	0000300005	FP53 WCK	FLT0005	Bloggs Haulage	Rapid Move Fleet	Car	View
Vehicle number <input type="text" value=""/>	0000300006	FHGFHDF	CFGHFG	Bloggs Haulage	Night Moves Fleet	Garage	View
Filter by	0000300007	FP07 MWJ	FLT0007	Bloggs Haulage	Rapid Move Fleet	Car	View
Home depot	0000300008	EP57 NCN	FLT0008	Bloggs Haulage	Rapid Move Fleet	Car	View
All <input type="text" value=""/>	0000300009	JP57 LKH	FLT0009	Bloggs Haulage	Rapid Move Fleet	Car	View
Fleet Group	0000300010	J19 SAW	FLT100023	Bloggs Haulage	Rapid Move Fleet	Tractor	View
All <input type="text" value=""/>	0000300011	ND04 FKD	FLT0011	Bloggs Haulage	Night Moves Fleet	Van	View
Vehicle Type	0000300012	N330 RFT	FLT0012	Bloggs Haulage	Night Moves Fleet	Van	View
All <input type="text" value=""/>	0000300013	EP02 TXA	FLT0013	Bloggs Haulage	Night Moves Fleet	Van	View
Lockout status	0000300014	EP02 TXB	FLT0014	Bloggs Haulage	Night Moves Fleet	Van	View
All <input type="text" value=""/>	0000300015	EP02 HXT	FLT0015	Bloggs Haulage	Night Moves Fleet	Van	View
	0000300016	EP02 TYC	FLT0016	Bloggs Haulage	Rapid Move Fleet	Van	View
	0000300017	EP02 TYU	FLT0017	Bloggs Haulage	Night Moves Fleet	Van	View
	0000300018	FP02 MNN	FLT0018	Bloggs Haulage	Night Moves Fleet	Van	View
	0000300019	FP02 NDP	FLT0019	Bloggs Haulage	Rapid Move Fleet	Van	View
	0000300020	GARAGE	FLT0020	Bloggs Haulage	Rapid Move Fleet	Garage	View
	0000300021	FP55 EVL	FLT0021	Bloggs Haulage	Night Moves Fleet	Van	View



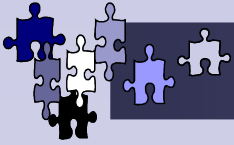
Advantages of Jigsaw 4GFM system

- ❑ Real time data view – information always current
- ❑ All additions / amendments are done real time over the web on the central database and take immediate effect
- ❑ Scalable solution 1 site to 1000's
- ❑ Local and/or Centralised data management and reporting
- ❑ Only web browser required – no issues with software moving to a new PC.
- ❑ Low cost migration with retrofit to existing FMU
- ❑ Automated Alarm generation using SMS and E-Mail
- ❑ No polling of FMU terminals – minimum daily support
- ❑ Access to data from any web enabled PC or phone
- ❑ Software update & enhancements managed centrally

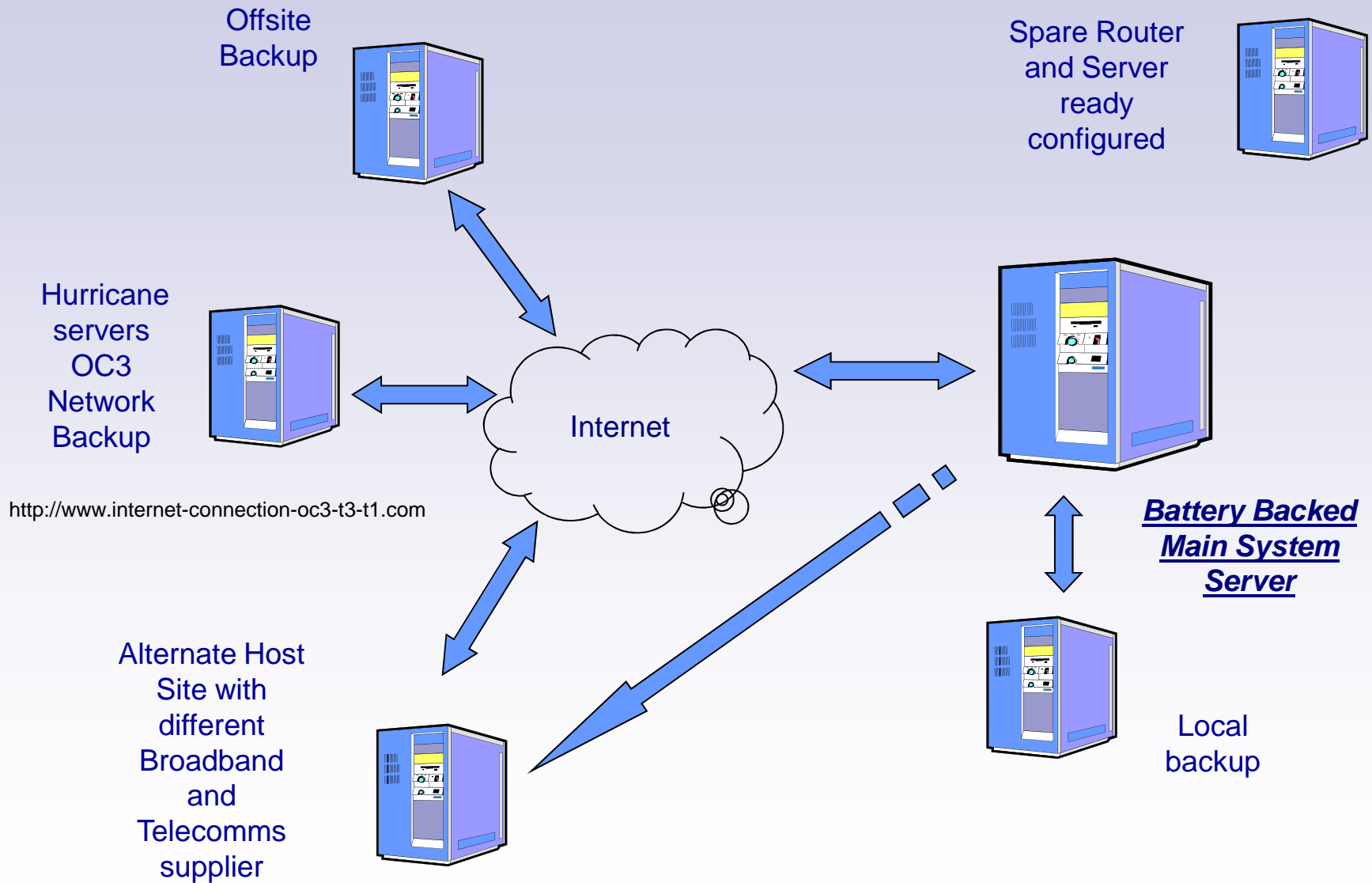


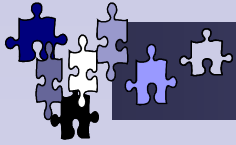
System Resilience/ Security

- ❏ Data backed up hourly to Disaster Recovery Centre
- ❏ Multiple Hardware Redundancy on servers
- ❏ All software written using industry standard Microsoft products
- ❏ Alternate geographical site for emergency server relocate.
- ❏ Duplicate Web Site in Scotland supply hardware compatible service.
- ❏ For Large Networks, web service can be run and managed from within Customers own IT infrastructure.



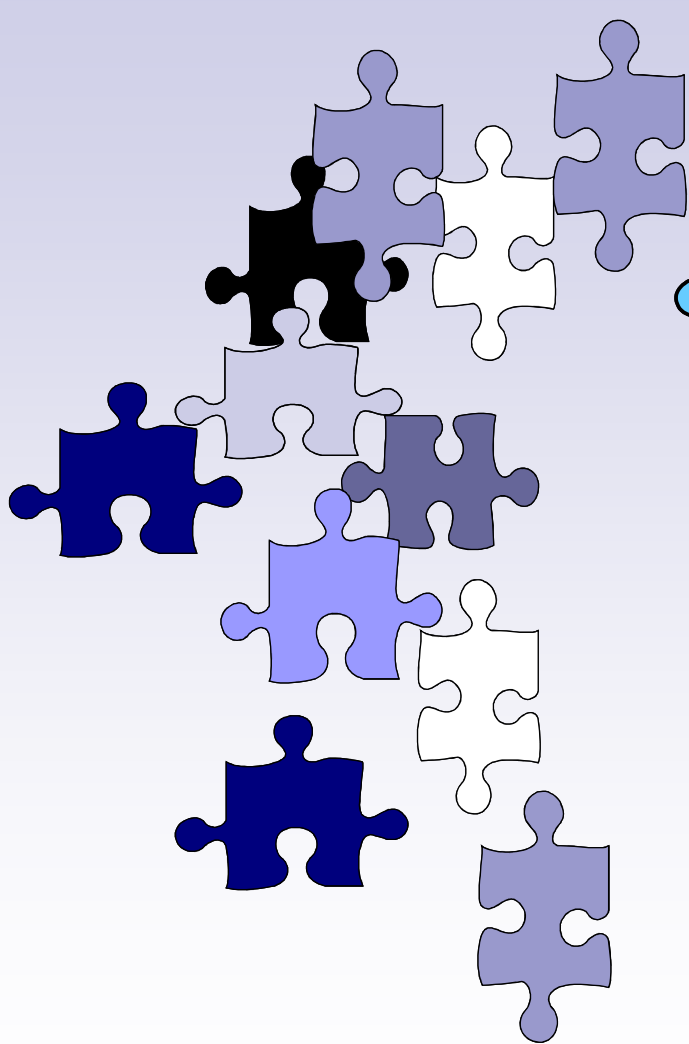
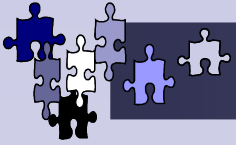
Resilience Map





Capacity and Growth Planning ...

- ❏ Current Install Rate is 15 to 20 per month
- ❏ Biggest Network so far is 40+ sites (in mid roll out)
- ❏ Max Supplier lead time of 5 weeks
- ❏ Supplier Capacity will cover any requirements foreseen.
- ❏ Web Servers and software all scalable – service can be spread to more servers, with more broadband lines as required but no capacity issues foreseen yet.
- ❏ Installation and Service support managed through network of proven commercial fuel management system engineers.



Jigsaw M2M

Thank You